



**Modern Dentistry  
for the Laity**

**FOURTH EDITION**

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By  
**ALFRED A. CROCKER**

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ALFRED ARMSTRONG CROCKER

# Modern Dentistry for the Laity ✓

and

Industrial Dentistry for the Corporation,  
Modern Preventive Dentistry  
and Industrial Safety  
Welfare Dentistry

A Classic of Dental Lore

By *Alfred A. Crocker*

ALFRED A. CROCKER

Cincinnati, Ohio

1922

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FOURTH EDITION ✓

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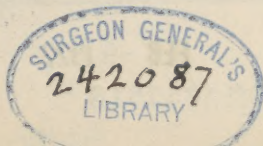
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Cincinnati, Ohio



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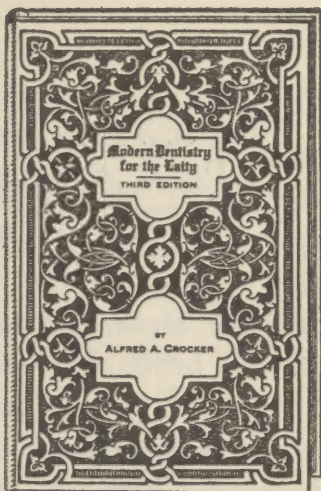
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*DEDICATED to the  
Dental Profession,  
whose avowed purpose is  
the prevention of decay  
and preservation of the  
teeth of the human race*



THE purpose of this book is to tell something to the very people who should know it. Much information and valuable knowledge is to be found if one will spend the time to dig it up. To dig it up and then place it before those most interested to know it, is indeed a valuable work. It places this book in the front rank of utilities for public service.



This is the statue of Dr. W. D. Miller referred to in preface to first edition of *"Modern Dentistry for the Laity,"* published June, 1918.



ERECTED TO THE MEMORY OF  
WILLOUGHBY DAYTON MILLER  
1853--1907

Dental scientist and educator; benefactor of his profession; friend of humanity; a native of Ohio, a citizen of the world; by the dentists of the United States, December 8, 1915.



# Eat With Your Own Teeth

THIS is very possible, providing you visit your dentist periodically, so he can detect the starting of decay and prevent the loss of the teeth. This system is preventive dentistry and is the only known method of saving the teeth. Generally the dentist is consulted so late that the decay has already caused the partial or complete loss of the tooth and makes an artificial tooth necessary. This process repeated, usually results in the loss of all the teeth, making it necessary to eat with the dentist's teeth. You can eat with your own if you see the dentist in time.





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## PREFACE TO FOURTH EDITION

In printing a fourth edition of this book I wish to thank the medical and dental profession as well as the laity for their generous and favorable criticism of my work and also express my appreciation of their interest in my endeavor to place the subject of dentistry before the public. This volume contains a few of the most recent articles which I have written for publication in prominent magazines, and beside I retain some of the older articles which so well cover their particular features of the work that they are indispensable and are therefore included herewith.

## *Preface*

There is an important point that I wish in this preface to stress and that is the wonderful opportunities that modern dentistry as a science and as a profession offers every young man about to choose his life work. In choosing dentistry one has the opportunity to serve mankind in a great calling, which is health, and to develop a lasting practice and much culture. As dentistry is now recognized as a health profession, the bond between the medical and dental professions has grown very close and interconsultations between the professions has become a matter of common occurrence in the clearing up of systemic mal-conditions due to tooth conditions for many patients.

## *Preface*

Benefits of Modern Dentistry for the Laity work movement will grow to great proportions. We are just in the beginning of the movement and we have just found out how to carry on this work. A new era is dawning in dentistry both in its importance as a profession and in its scope of utilization by the public as a health measure.

The work of stimulating this interest is a non-commercial work and carried on wholly out of interest in the popularization of dentistry movement of which this work of Modern Dentistry for the Laity is one of the principal elemental and initial works.

ALFRED A. CROCKER.

*January, 1922.*



## PREFACE TO THIRD EDITION

It is indeed complimentary to the subject of dentistry that there would be a demand for a third edition of this book, and, of course, it is a pleasure to respond to such a pleased body of readers. The interest shown in this work has been pronounced, and it is hoped that this third edition will meet with the same insatiable demand. The program is strictly an educational one, educating and informing on a subject which has for far too long been dormant, but now that the author has found the way to properly present the subject for public consumption the response indi-

## *Preface*

cates that a popular chord has been struck and everybody is whistling the sweet music.

Some of the essays of former editions have been left out and replaced with more recently published articles. One of the fundamental doctrines of the circulatory system, that it conveys health or illness, sees its vindication in preventive dentistry. Toxins carried from the lower bowel, causing toxemias of colds and grip, are also carried from abscessed teeth, causing colds and rheumatism. The former fact has for a long time been popularly understood by the laity and to-day the later fact about the teeth being foci of infection is being popularly accepted by the



## *Preface*

laity too. This volume, along with the two previous editions, is gratefully dedicated to the dental profession, without whose efforts for research in dental matters many facts now known would still be mysteries.

ALFRED A. CROCKER.

*January, 1920.*



## PREFACE TO SECOND EDITION

The importance of Dentistry as a health profession has been greatly increased by the emphasis given the subject of Preventive Dentistry and Oral Hygiene during the war. The proving up of various relationships of systemic disease to oral sepsis has also hastened the necessity of bringing the care of the teeth prominently before the American public. The care of the teeth of children as featured in municipal free dental clinics is a great educational work calculated to bring in a new generation, well informed on the importance of care of their teeth.

## *Preface*

The laity at large would do well to take cognizance of the significance of children's clinics, for what is good for the coming generations is good for the present one. A clean and healthy set of teeth makes a bright scholar, likewise a clean and healthy set of teeth makes a successful grown-up. This subject is one of the principal features of general attractiveness.

In publishing this second edition MODERN DENTISTRY FOR THE LAITY AND INDUSTRIAL DENTISTRY FOR THE CORPORATION the writer has sincere hopes that this pamphlet will help the educational contributions of others and bring the gospel of Tooth Hygiene to everybody, both young and old.

## *Preface*

The similarity, in some instances, of these several essays, is on account of their having been written to cover the subject as a synopsis to suit various prominent magazines in which they were published. It being the idea to make each essay cover some of the important ground and be in itself an argument. However, each one has a progressive addition of new ideas which occurred to the writer as the subject progressed. The essay "Tooth Troubles," gives an idea of what prevention prevents. For those interested in establishing clinics a list of actual requirements is given in the last chapter.

ALFRED A. CROCKER.

*January, 1919.*



## PREFACE TO FIRST EDITION

In writing these short essays on dentistry and its application to the individual welfare it has been the writer's intention to point out how decay of the teeth is the prime factor in the ultimate loss of the teeth and also how this destructive cause can be prevented. Caries, the technical dental term used meaning decay of the tooth structure, has been a prime subject of dentistry and has received immense attention by the dental profession. The investigator who isolated the germ of caries, the late Dr. W. D. Miller, an American, spent years on this subject and we have as a result a sure method of preventative dentistry. It is to

## *Preface*

detect the decay. This can only be done by a dentist. The operation of detecting decay is known as prophylaxis. The first monument ever erected to a man of the dental profession was erected on the spacious campus of the Ohio State University to the memory of Dr. W. D. Miller. This statue of Dr. Miller stands in a very prominent position of the grounds of Ohio's largest university. From this you will infer the importance and intimate meaning of this subject of decay to humanity. To explain this subject and its application to every-day efficiency this pamphlet is written.

ALFRED A. CROCKER.

*June, 1918.*



## CHAPTER I

### MODERN DENTISTRY FOR THE LAITY —ITS ORIGIN AND PROGRESS

The origin of the movement for the publicity on dental subjects rests upon a triangular base, very well grounded and of sound foundation. The three elementary parties to the propaganda are the public, the dental profession and the dental trade. Before systematic propaganda was started, the small fraction of the people having dental work done indicated great possibilities of benefits from better distribution of dental knowledge. The dentists in writing on the subject of care of the teeth and preventive dentistry frequently

## *Modern Dentistry*

exclaimed, "Oh, if the people could only understand more about the importance of their teeth, how grand it would be!" This indicated that the dental profession were seeking some avenue of publicity for the necessity of their work but had not yet found it.

On account of the feeling in dental circles regarding advertising, the subject of ethical dental publicity remained an unsolved problem. The dental trade at that time seemed hedged off from the public without means of framing public opinion on the importance of their business, a privilege enjoyed by most every other line of trade you can think of.

## *Modern Dentistry*

The advertising by tooth preparation manufacturers has had the tendency to leave the impression on a great majority of the public that a tooth brush and a package of paste will preserve the teeth. In large type most pastes are heralded as tooth savers—and by association of ideas health preservers—and in small type the advertisements go on to say, “See your dentist semi-annually,” which is indeed very kind to the profession. But as the real importance of the relative values of the tooth paste and dental service is just the other way, the dental service being the real tooth saver and health provider, it occurred to me that a public statement which

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would give all attention to the value of dental work and give the dentist all credit for the ability to preserve the teeth without but slightly mentioning tooth paste would be the fairer method. This led to my giving the dental profession large type representation and tooth pastes small type notice.

With the above as a state of the dormant forces the preparations for the war swept over the country, bringing every line of trade and profession to the front that were essential to the safety of the nation. Dentistry was named as essential, and many a recruit found out how essential it was when he received his notice of dental requirement and

## *Modern Dentistry*

had to go to a dentist before he could be mustered in. This in itself was a complete demonstration of the possibilities of dental propaganda and pointed out to me one way it could be done. And the time had come when it could most easily be accomplished, for the word "preparedness" had assumed a larger meaning by including dentistry. It occurred to me that a dental supply man could take a hand in the propaganda of dentistry and do a great beneficial work to the country, could help the dental profession in explaining the subject of dentistry to the people, extoll the benefits derived from preventive dentistry, and explain the subject of focal

## *Modern Dentistry*

infection—the same subject which had made the specialty professions of eye, ear, nose and throat so prominent—and at the same time bring about a thorough understanding of the value and importance of the dental business, the business which stands behind the dental profession and furnishes instruments, materials and supplies for the relief of humanity through their use in the hands of the dental profession. These fundamental ideas on which the whole subject is built and later took form in the first edition of my book, “Modern Dentistry for the Laity,” were tested out as time went on and in the fall of 1917, by personal interviews with representatives

## *Modern Dentistry*

of each of the three parties which form the foundation, I convinced myself that the idea was favorable to all parties concerned. During the spring of 1918 about fifteen articles were published and read by the public in magazines. Each article was a synopsis of the work performed by a dentist and explained the process of decay. Besides, the periodical visit to a dentist was explained as being not only for a tooth cleaning but also to detect decay. Announcement of the progress of this work was made to the trade in June, 1918, when some of the articles which I had succeeded in having accepted for publication were reprinted in book form

## *Modern Dentistry*

with a preface and index entitled "Modern Dentistry for the Laity." This book was distributed to a list of incorporated industrial and mining companies and railroads, to all public libraries, to dentists and to the dental trade. From that time on the idea began to grow and the book was enlarged by additional papers that had been published by the time the second edition was printed. All lines of business eventually find a legitimate outlet for a statement of their essential place in the estimation of the public and standardize a method by which they can constantly maintain public opinion on the benefit of their offices to humanity.



## *Modern Dentistry*

The dental profession had for some years been carrying on children's clinics which is a form of dental propaganda, for it reaches the home and directs the attention of the coming generation to the necessity of care of the teeth and the importance of seeing a dentist periodically. Though this was well taken care of by the dentists, it however left the adult population without direct appeal, and, as war work required the adults, the first subject to receive my attention was, "Dentistry in the Hospital." This subject was given an acceleration and impetus with articles in industrial magazines on the affiliated subject, "Industrial Dentistry," for many

## *Modern Dentistry*

factories had medical service in small hospitals and were prospects for dental service as soon as the subject could be thoroughly understood. This was very timely and interesting to factories doing war work. "Industrial Dentistry" has been the means of reaching a great number of people with the gospel of dentistry in both the laboring and capital classes, and still forms one of the most effective methods of reaching large numbers of people. It is a business proposition and safety welfare work of the highest order, completing the hospital which is incomplete without it. A very large field besides this is the general hospitals of which there

## *Modern Dentistry*

are a great many, and of which very few have dental departments. Literature on this subject became necessary and led me to make several trips to hospitals both with and without dental service. From the resulting interviews I wrote the first articles the Hospital Magazines ever printed on the subject, "Dentistry in the Hospital." Group diagnosis, the modern system in a modern hospital, requires opinions and findings by diagnosis of specialists in all branches of the healing art and, of course, is incomplete without the dental clinician's report of tooth condition and his X-Ray of the teeth, together with his recommendations. The recom-

## *Modern Dentistry*

mendations of a hospital dental clinician cover certain first aid work he will do himself to clear the patient of the hospital and, besides, if necessary, he recommends further work for the patient's dentist to attend to when the patient is well again. With literature of this kind we have something with which we can reach the captains of industry and help them perfect their elaborate systems of safety welfare work, and with which we can reach the many hospitals not yet equipped for dental diagnosis or dental service. In carrying on this propaganda I have clung to the system of free distribution of the articles written for the general public, because

## *Modern Dentistry*

the delivery of the subject is in the nature of a safety warning.

Any paper or magazine can get an article gratis for the asking. Besides, many pamphlets have also been distributed free. For those especially interested in this subject, the book contains all the information in condensed form, covering various phases of dentistry; preventive dentistry for the individual; see your dentist; industrial dentistry; dentistry in the hospital; focal infection; dentistry for life insurance and odontolysis, and meets the demand that has sprung up for this subject by those who seek it in the book stores and public libraries.

## *Modern Dentistry*

Knowing what we now know about the subject, I consider it a public trust to deliver the message to every one by every means possible. Instead of having humanity wait for the slow process of evolution of the unaided current thought to bring them to the subject of dentistry, dental propaganda is accomplishing the necessary work by direct and efficient methods, bringing the subject to them. At the present time the medical profession are giving great assistance to the subject by directing their patients to have a dental diagnosis. Several medical magazines have dental departments, edited by dentists. Cities have dental health department bulletins. The

## *Modern Dentistry*

dental profession are very much interested in the movement and have contributed many articles for the press and magazines, and have addressed large audiences on the subject of care of the teeth and their relation to health. The American Dental Society formed a branch society for the industrial dental surgeons at the meeting, August, 1918. In August, 1919, the Industrial Dental Surgeons met with the National Safety Council. The Life Extension Institute of New York has added dental diagnosis to its medical supervision. Many of the factories using dental service print articles on the subject of care of the teeth in their service department weeklies.

## *Modern Dentistry*

When I took up this subject, only about forty corporations had established dental clinics for safety tooth work—now there are over one hundred and fifty. The National Safety Council has incorporated dental service and dental prophylaxis in their regular schedule for safety control.

Safety in the factory nowadays does not mean merely prevention from accidental injury, it means also prevention from injury that eventually comes to those not informed on various forces that are bound to affect their welfare if not pointed out by an overseeing superintendent or service director, who has at his command



## *Modern Dentistry*

specialists in various professions and sciences making periodical examinations. Safety is the purpose of all welfare work and this now very properly includes preventive dentistry. The value of this work to the public is that it is educating and informing on a phase of public health, and points the way to prevention of tooth troubles. The value of this work to the dental profession is that it is an assistance to the work already being carried on in school clinics, and broadens the scope of dental publicity in a perfectly ethical way which the school clinic started. The value of this work to the dental trade is that it establishes with full sanction of both the public and

## *Modern Dentistry*

dental profession a method by which the dental trade can assist the dental profession in the dissemination of the importance of seeing a dentist for care of the teeth. By the methods now started the various campaigns for teaching the laity about dentistry will surely make a wonderful change in the amount of dentistry performed, for annually, numerous people will be reached who otherwise would neglect that duty to themselves.

The subject of preventive dentistry is one that needs publicity to make it universal. For preventive dentistry to prevent it will have to get to the people, and that only will come by publicity. This feature of the

## *Modern Dentistry*

case makes it real missionary work and led to the expression of which I have made occasional use, that the purpose of this publicity being to tell something to the very people who should know it, places dental propaganda in the front rank of utilities for public service. Not only for health, but also for appearance, is dentistry a benefit to mankind. Dental methods of today make it possible for the grandparents to retain their youth and appear in public with just as pleasing appearance as their grandchildren. In dentistry the people find the fountain of youth. When it is realized that every person has teeth or wishes he had some, is

## *Modern Dentistry*

not the subject of preventive dentistry interesting—the subject which tells how to save the teeth by seeing your dentist? A good tooth in the jaw is worth ten on a rubber plate, but on the other hand a set of false teeth is better than one tooth that is a focus of infection.

Educational work of this kind is a subject which grows as time goes on and will call for different methods, possibly to suit changing and progressing conditions, all of which can be taken care of when the time arrives. World peace will give industries opportunity for closer study of dentistry and to plan their safety welfare along lines found so helpful during the war, by

## *Modern Dentistry*

including dental as well as medical supervision and the hospitals, to meet the growing necessity of group diagnosis, will install dental equipment and retain dental clinicians and individuals should see to it that they visit their dentist periodically at least twice a year for prophylaxis. It is with the intention of helping this subject along that I have been carrying on the work of "Modern Dentistry for the Laity."

## CHAPTER II

### LECTURE ON THE TEETH

As we all understand, the teeth are coming in more and more for their share of attention, and what used to be disregarded in their care is now regarded as most important. The reason for this is that we now know positively that the teeth have a great deal to do with our health and general well being. Instead of thinking, "Oh, well, if I lose that tooth I can get a false one which will do just as well," we now take notice and say, "I can save that tooth if I consult a dentist." False teeth are nothing more or less than

## *Modern Dentistry*

makeshifts to take the place of lost teeth, just the same as false legs and arms or false eyes are. But we seem to be alert to take much better care of our arms, legs and eyes than of our teeth. Possibly it is because we think we can get by in fooling most of the people with decayed teeth or false ones and not realize that it all can be prevented just as easily as we prevent loss of our arms and legs. Possibly it is because the subject of saving the teeth by preventive dentistry has not been brought up in the right way, or because the need of seeing a dentist in consultation on tooth conditions has not been considered in an equal degree as the need of calling in a physician when you

## *Modern Dentistry*

feel ill. This is natural, however, and is because tooth decay, which is one of the causes of ultimate loss of the teeth, is painless, and the process of decay, if not prevented or stopped, continues until the tooth aches, and then dental surgical treatment is the only means left of saving the utility of the tooth.

Thus we go on thinking we are all right until suddenly a terrific pain starts up—then to the dentist we go. From a dentist's point of view this is most lamentable, although we have been doing what we thought was all right; but in reality it was just the wrong thing.

Now the prevention of decay is so important that the dental pro-



## *Modern Dentistry*

fession recently recognized the great work of Dr. W. D. Miller, by placing a monument to his memory on the grounds of the Ohio State University. Dr. Miller did a great deal of research work on dental subjects and especially on prevention of decay, and brought the subject up in such a form that when one once grasps the idea of preventing decay, one can actually do it. This requires periodical examination of the teeth by a dentist at least twice a year, so as to stop the advance of decay if any has started. Home care of the teeth by use of tooth brush and dentifrices is commendable and necessary for cleanliness, but absolutely useless so far as preventing decay, as

## *Modern Dentistry*

most of us have found out; for decay takes place in spite of all household attempts to prevent it. Why is this? Simply that the decay starts in the crevices between the teeth, where the home efforts to keep them clean do not reach. For this reason it becomes necessary to see a dentist regularly for tooth cleaning and examination and detection of decay, if any.

A dentist can properly examine the teeth, where it is impossible for the individual to do it himself.

Decay after it gets started, and not interfered with or stopped by the dentist by a filling, continues on its course of destruction and eventually finishes by the decay reaching the nerve pulp—and a

## *Modern Dentistry*

terrific pain announces this stage. If one still refuses to go to a dentist the tooth is doomed, and very often it is too late and the only way to save the utility of the tooth is to save the tooth structure by extracting the nerve and thus leaving a dead tooth in the mouth. This is often done, and by the present method of root-canal filling and treatment the tooth lasts very well for years, especially if the patient is young. However, after middle life the ultimate abscess of this tooth begins to accrue. This is where the periodical visit to a dentist again comes in very valuable for the patient, because a dentist looks at this feature of teeth with root-canal filling, and at periods X-

## *Modern Dentistry*

rays them to detect the oncoming of the abscess. You may ask why that abscess comes. All we know about it is that it is nature's method of getting rid of a dead tooth. Then you may ask, why did not the dentist extract it at first? According to present-day ideas, the opinion is divided, but the consensus of opinion is that it is good dentistry to save the dead tooth for its utility as long as possible, for as long as it is in healthful condition it is far better than a false tooth, both in utility and beauty of appearance. People who have followed the preventive dentistry method have very few fillings in their teeth and those are small, and besides they generally have their own teeth. Peo-

## *Modern Dentistry*

ple who have paid some attention, but not a great deal, to their teeth have large fillings and some false teeth, and perhaps later on will have all false teeth. People who disregard all attention to their teeth have a hard time of it when at last they have to go to a dentist.

The accepted theory of decay is that it is the result of localized acid conditions in the mouth, caused by fermentative action of small bacteria held on the surface of the enamel of the teeth by filmy plaques of food substances. Between the teeth, where the tooth brush or floss have missed, these plaques harbor the acid forming conditions which dissolve out the lime salts of the enamel and the dentine or tooth structure, mak-

## *Modern Dentistry*

ing additional lodgment space in the cavity as it proceeds for additional bacteria. When it is understood and realized that this germ of caries or decay multiplies at the rate of four million per minute, you will realize what an active enemy you have to deal with in preventing decay. The idea of going to a dentist twice a year is to permit him to detect the places where decay has started and to fill the small cavities. It takes about a year of continual activity of the decaying process to reach the pulp of the tooth after starting at the enamel of the tooth, so you see an examination every six months leaves a good margin of safety for the vitality of the tooth.

## *Modern Dentistry*

To show you the value of regular inspection of the teeth for detection of decay, and general cleaning to prevent further decay, stopping what cavities there were with fillings, I ask you to study the following table:

|                     | 1907 | 1908 | 1908 | 1909 | 1910 | 1910 | 1911 | 1912 | 1913 | 1913 | 1914 | 1914 |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
|                     |      |      | 1909 | Nov. | Nov. | Apr. | Apr. | Apr. | Apr. | Apr. | Apr. | Jan. |
| Diphtheria . . . .  | 6    | 2    |      | 1    | 0    | 0    | 0    | 0    | 1    | 0    |      |      |
| Mumps . . . . .     | 8    | 3    |      | 10   | 4    | 0    | 0    | 0    | 0    | 0    |      |      |
| Scarlet Fever ..    | 17   | 8    |      | 12   | 8    | 0    | 0    | 0    | 0    | 0    |      |      |
| Pneumonia . . . .   | 3    | 5    |      | 4    | 3    | 0    | 0    | 0    | 0    | 0    |      |      |
| Measles . . . . .   | 24   | 50   |      | 40   | 25   | 0    | 0    | 0    | 0    | 0    |      |      |
| Tonsillitis . . . . | 19   | 16   |      | 3    | 3    | 0    | 0    | 0    | 0    | 0    |      |      |
| Whooping Cough      | 7    | 2    |      | 2    | 0    | 0    | 0    | 0    | 0    | 0    |      |      |
| Chicken Pox ..      | 15   | 17   |      | 10   | 6    | 0    | 0    | 0    | 0    | 0    |      |      |
| *Croup . . . . .    | 4    | 0    |      | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |      |

This is the record kept of children's diseases in an orphan asylum before and after work and periodical prophylaxis of the teeth was started. Work was started in November, 1910, and in

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\* School statistics by Dr. Alfred C. Fones.

## *Modern Dentistry*

April, 1911, the mouth of the last child had been put in order. Notice that for nearly four years after the starting of dental care the diseases of children had been practically eliminated. The six cases of measles occurring during 1913 were caused by a new child, whose mouth was in bad condition on entering; and the children infected were all in need of additional dental work. The one case of diphtheria was also from a new child with bad teeth.

† Similar results are found after dental care of adults. These remarkable results are also reiterated in the report from a large industry, where 2,002 men and women were employed. Dental

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† Industrial statistics by Dr. Thaddeus P. Hyatt.



## *Modern Dentistry*

work was started in 1917. Out of the 2,002 patients it was found that there were 9,139 cavities, or an average of 4.6 cavities per patient. There were 1,230 badly decayed teeth, or an average of 0.6 per patient. They had lost 9,320 teeth, or an average of 4.7 per individual. Of those examined 951, or 47.5 per cent., showed inflamed gums, 68 had abscessed teeth, with pus flowing into the mouth, and 161 additional cases showed pyorrhea, of which 62 had reached the pus stage. These figures are quoted not because they are in any way indicative of an excessive amount of dental impairment, but rather as an indication of what may be expected in any representative group of sim-

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ilar size. The first work attended to in all these patients was to place all teeth in good condition by filling all cavities, treating all abscesses and pyorrhea condition, and having false teeth to replace the vacant spaces. After this work was done by each patient's family dentist, the institute dentist, who had diagnosed each case and recommended the work that had been done, checked up each case; and thereafter by the periodical prophylaxis and detection of additional decay, if any started, kept all these patients in good mouth condition and materially helped their health and increased their production. This work showed the first year reduction in the follow-

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ing ailments of remarkable percentage: Neuralgia and Neuritis 75 per cent., Colds 16 per cent., Headaches 52 per cent., Skin Troubles 53 per cent., Nervous Troubles 40 per cent.

The next subject for our consideration, one which if not watched and prevented also leads to the loss of the teeth is pyorrhea. Pyorrhea is a metabolic disturbance of the human system, which manifests itself by salivary calculus deposit on the teeth, which in turn sets up gingival irritation of the gums, increasing the bacterial production of germs in the mouth to a pathogenic degree. The blood attracted to the gums by this pathogenic condition causes congestion, a swollen

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condition of the gums, and the white corpuscles of the blood are killed by millions in their endeavor to ward off the danger of the bacteria which are in control. These dead corpuscles form the pus which is present in this condition. Underneath the gums a still greater damage is going on. The necrosis of the jaw bone, due to breaking down of the peridental membrane, uncovers the roots of the teeth and lessens the tooth anchorage, causing the teeth to become loose. Cleanliness of the teeth is absolutely necessary to prevent it, that is, the pathogenic germs found normally in the mouth should be continually under control. Deposits of tartar on the teeth are a frequent cause

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of incipient pyorrhea, and if not removed and the gums healed lead to the further stages of the trouble. Of course, where this progresses it is because of the neglect by the patient or lack of information by not going to a dentist. While the teeth themselves may be perfect as to fillings and decay, their contact with the gums and jaw bone or alveolar process in which they rest becomes insecure, and the constantly increasing army of bacteria which the white corpuscles of the blood can not control consumes the peridental membrane, which is the safety lining of the tooth root and tooth socket. This gone, necrosis of the bone sets in, and soon the teeth are so loose

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that the gum alone can't hold them and they drop out. Pyorrhea is also caused by the irritation of margins of the gum by tartar, toothpicks, hard tooth brushes, impacted decomposed food particles not promptly removed, and injury to the gum from malocclusion. There are other causes, but the ones mentioned are all within the jurisdiction of each patient to prevent.

Another subject I wish to touch upon is the relation of tooth and gum condition to the general health. In discussing decay I mentioned the abscess which eventually comes at the roots of devitalized teeth, and under the subject of pyorrhea the abscessed condition of the peridental mem-

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brane and gum sockets. The white corpuscles of the blood in coagulating at these abscessed centers in order to counteract the trouble are killed and accumulate, forming pus which then is a poison and is reabsorbed in the blood stream along with the excess of bacterial production. This goes direct to the heart and thence to all parts of the body. While infection of this kind can take place from any part of the body such infection coming from the teeth and recognized as such has cleared up many cases of neuralgia, neuritis, rheumatism, deafness, insanity, coryza, headache—almost the entire category of bacterial diseases formerly called incurable or chronic.

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Another feature of the necessity of care of the teeth is that their original function is to properly prepare the food for digestion and assimilation. A uniform ration of food as required by the body requires a uniform predigestive apparatus and indicates the necessary upkeep of the teeth to maintain sufficient teeth in good order to derive sufficient nourishment from the ration for active participation in your vocation.

The object of this work is to develop an informed public. We more readily accept things that we understand.



## CHAPTER III

### SAFETY DENTAL SERVICE

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“INDUSTRIAL DENTISTRY A GREAT  
AID IN INDUSTRIAL MEDICAL  
SUPERVISION.”

For many years medical service in large factories has been recognized by leading safety welfare workers, and consequently industrial medical care has become a great department in the physical care of employees and a great factor in their better health, more continuous production and happier homes, and for the factory it has reduced absenteeism and labor turn-over. The idea of taking care of accidental injuries and sickness suggested their pre-

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vention, for on a group such as is found in all factories a regular schedule of preventive measures can be carried out. If, unless certain preventive measures are carried out, accidental injury or sickness are bound to occur, why not put the emphasis on prevention and also be ready to take care of the injury if it accidentally does happen?

Group diagnosis is the outcome of this course of reasoning and eventually brought the subject of dentistry into consideration as a preventive measure, for many human ills have been recognized by the medical profession to be due to the teeth. This brought the dentist into the breach as a sustainer of health and thereby a

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factor in production. Dental care was placed on the regular schedule for safety control at the meeting of the National Safety Council in Philadelphia, October, 1915, and since has shown a gradual increase in adoption, there being now over 150 companies operating dental departments in their medical supervision.

As an example of how helpful this work is toward reducing illness, here is the case of a large industry employing 1,800 people. Several years ago their medical supervisor recommended the installation of a dental department for safety tooth work, and these 1,800 people were examined dentally, the dentist charting each mouth. The results showed 9,520

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cavities, 3,450 missing teeth, 170 pyorrhea cases, 850 with abscessed teeth. These are the usual findings in most groups of this kind where dental work has not been the vogue. The dental clinician gave each patient a card indicating the necessary work and directing that the family dentist do the work. When it was done it was checked in by the factory clinician. Compared with previous years, which records in the medical department showed, the reduction in maladies as a result of this dental work was marvelous. The reductions were big; for instance, colds 50%, headaches 60%, rheumatism 60%, boils and carbuncles 70%, nervous trouble 40%. This means

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that where before dental attention there were 100 cases of colds, after dental attention there were only fifty cases, etc.

After once getting all the teeth of patients in order the dental clinician by periodical prophylaxis and cleaning, keeps them in good order, for by his preventive work he can prevent further decay or pyorrhea, from which all other tooth and related systemic troubles follow. To do this he must see each patient at least twice a year. Medical supervision in factories has had a great deal of preventive work to carry out—much more than is generally supposed. Many patients after examination have been found to be needing eye glasses or hernial

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trusses or minor operations, such as adenoids or tonsils, and sometimes larger operations, such as tumor or appendicitis; and many have been found under weight, with tubercular tendencies. Looked at in a preventive sense they are just the same in importance as dental operations, such as fillings, replacement of empty spaces with false teeth, treatment of abscessed teeth and pyorrhea and extraction of teeth too far gone to save, etc.

As a complement to the regular medical work dental care is necessary, and where group diagnosis is attempted, dental supervision is found to be indispensable for accurate and definite results, as many cases formerly

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classed as chronic or incurable are cleared up by dentistry.

For the factory, medical supervision is one of the best steadiers of employment. It reduces turn-over through health maintenance. Instead of permitting employees to get ill and lose jobs through illness, their health is maintained and they are kept on the job. This method reduces turn-over, which in itself is known to cost at least sixty dollars per person. In some factories, where the class of work is technical and skilled, the cost of turn-over is much greater. Hence all the more importance of keeping turn-over at a minimum. The value of dental work in this direction is estimated at

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from one-sixth to one-fifth of the entire medical supervision.

Dentistry in the factory need only to be thoroughly understood to be universally adopted.

As a selling talk to corporation managers, who, through their medical departments are urged to install dental equipment for safety tooth work, we would say that the principal benefits to a corporation from dentistry in the factory are derived through health maintenance. This has its effect on reduction of turnover of labor and decrease of hours lost from production; in other words, increase of production. Dentistry is no more welfare work than is medical care. Both are safety welfare work, and that is differ-



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ent, for this means a benefit first to the labor element which is for the purpose of maintenance of health for production. In each plant the idea is maintenance of production for the specific output that it manufactures. As it is known that the cost of hiring and teaching the initial steps in the work and dismissal of each employe is about \$60, the reduction of turnover is valued at the rate of \$60 per person. In large factories the reduction is in figures which make the work pay splendidly with a big margin over the cost of the work involved in the entire medical department of which the dental service is a part. Mutual aid and safety welfare in operation are almost identical. If

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the employes pay for it, it is mutual aid; if the employer pays for it, it is safety welfare work. Plain welfare work does not exist in factories, for that expression applies in community work and so-called welfare centers. Safety welfare is human maintenance and efficiency work along scientific lines for the benefit of production. Plain welfare work is relief of suffering and care of the needy for humanity's sake. When feeling exists over safety work it is due to a misunderstanding of the difference between safety welfare and plain welfare. Besides, another difference is that safety welfare merely indicates what ought to be done

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and welfare actually does relief work.

To go a little further with this calculation of the money value of the saving by reduction of turnover. On an operative force of one thousand a turnover of one hundred and fifty per cent. was experienced in one factory doing the same class of work that another with two hundred per cent. turnover. One had medical and dental service and the other had not. According to the unit saving of \$60 for individuals, the saving to the company having medical and dental service on five hundred men was \$30,000. If we estimated that the dental phase of this work was one-fifth, the dental department saved \$6,000.

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In the same factory the hours saved by the dental department was two thousand, giving each hour saved a sales value of two dollars, this makes \$4,000 saved; together these two items total \$10,000 as a credit for the dental service. While these figures are not exact, they give a basis on which a calculation of the value of dental service to a factory can be made.



Dr. J. P. Becker and assistant at the R. K.  
LeBlond Machine Tool Co.'s Dental  
Clinic giving Prophylaxis.



## CHAPTER IV

### EVIDENCE OF THE VALUE OF PRE- VENTIVE DENTISTRY TO IN- DUSTRIAL CORPORATIONS

In my work of presenting the subject of Preventative Dentistry to manufacturing corporations, various industrial and trade magazines have accepted my articles, believing in the fundamental benefits of good dental advice to humanity, although the subject of dentistry is foreign to the general subject and class of trade to which their magazines are devoted. The regular dental publications which are read mostly, and I might say almost exclusively, by the dental profession and trade have been

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filled for years with the subject of Preventative Dentistry, and the wish has often been expressed that its benefits to public health be brought to the knowledge of the public.

Industrial managers, all over the country are interested in the subject, and you will find it as one of the principal items of safety welfare work as outlined by the National Safety Council.

In reply to my questionnaire mailed in October, 1918, to various companies using the dental service system, the following replies have been received: \*

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\* Several magazines have used these letters without reference to their being taken from this book. These are the original letters, however, and we have them on file in our office.—Alfred A. Crocker.

See Questionnaire at end of book.



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THE JOSEPH & FEISS Co., Cleveland, say:

While it is difficult to trace the definite results of benefit obtained from this work we feel convinced after six years' experience that it should be classed along with medicine and surgery in first aid work.

I am not able to answer questions as to the relative importance of dentistry and medicine. We are convinced without drawing any comparison that dentistry, medicine and eye work form an essential and profitable part of our work and are all of them a tremendous aid in the development of steady and efficient men and women.

Sincerely yours,

EJ:FY

ERNEST JOSEPH.

ARMOUR & Co., Chicago, say:

We would advise you that we have had our dental work going such a short time, we are unable to draw any conclusions as to the effect of this work upon efficiency, lost time or quality of finished product. We feel that, in principle, this department should have an influence on all of these items, but

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as yet, we have been unable to ascertain just what it is. The results of the Dental Department are more or less intangible and are similar to welfare and medical work,—in that they increase the morale and loyalty and efficiency of employees, all of which are extremely beneficial to any employer of labor.

It has been our aim, for the present at least, to make our Dental Department more educational than anything else, and if we succeed in teaching our people the value of caring for their teeth, we shall feel that the department has been a success. We can say, confidently that it is our belief that the Dental Department is an institution with us which will remain.

Yours very truly,

ARMOUR & Co.,

HGE:GA

*H. G. Ellerd.*

THE DAYTON METAL PRODUCTS Co., Dayton, say:

It encourages us to know that many other large industries are interested in this comparatively new branch of welfare work, which is of such vital importance at this time. They have awakened to the fact that there is a very close con-

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nection between Mouth Infection and Systemic Diseases, that good teeth means good health, and good health means efficiency.

There never was a time in the history of our country when it was so necessary to bend every effort toward the maintenance of human efficiency than at present.

This work has saved us 21,031 hours so far this year.

Yours very truly,

THE DAYTON METAL PRODUCTS CO.,

MH. *Dr. H. B. Millhoff*, Clinician.

THE EMPORIUM, San Francisco, say:

Our Clinic is open daily from 9 to 12 and we handle on an average, 200 cases each month. We find that our employees are very eager to take advantage of the opportunity of having good work done, with the least expenditure of time and effort.

It certainly ranks with medicine and surgery as a welfare feature and we find that the two branches work splendidly together. We have arranged to have all appointments made during store time

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without any deduction for the time lost, and we are confident that our employees are not abusing this privilege, but are grateful not only for the temporary relief but for the permanent treatment which our dentist gives.

Yours very truly,

THE EMPORIUM,

*Miss Leslie Wilde,*

LW:EHT.      Assistant Welfare Director.

KABO CORSET Co., Chicago, say:

We are pleased to state we consider dentistry in factories as of more benefit than either medicine or surgery. The results of dentistry in our factory have in many ways exceeded our expectations.

Dentistry in our factory has saved our employees, as well as ourselves, over 2,000 hours in the past six months, time which would have been counted as lost working time, as well as protecting said employees from the clutches of unscrupulous advertisers and incompetent practitioners. It has increased production in proportion to working hours saved.

The preventative features of dentistry are not apparent to everyone, such as

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medicine and surgery is, but it is these preventative features which lead us to express the opinion that dentistry exceeds in benefit and importance to either medicine or surgery.

We have one instance in which we are confident a valuable employee was saved from insanity and a great many cases where pyorrhea was prevented, thereby saving the employee and ourselves much valuable time for work that would have eventually been lost.

We do not hesitate in saying that we consider dentistry, and especially preventative dentistry, as of equal importance to medicine and surgery as welfare features in any corporation.

Yours very truly,  
KABO CORSET COMPANY,  
By *Frederick H. Mill*,  
Mgr. Ind. Serv. Dept.

LORD & TAYLOR, New York, say:

Our dental clinic is operated under the supervision of the Department of Instruction and Training. You may deduct from this that it is a part of the educational scheme. We compel an oral,

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as well as a physical examination, of all those entering our employ, for the purpose of doing preventative work. The clinic is still in an experimental stage and we are not prepared to give statistics.

Yours very truly,

ISABELLA BRANDOW,  
Department of Instructions  
and Training.

THE T. EATON CO., LIMITED, Toronto,  
say :

We find that the most apparent result of dentistry in our establishment is the emergency work which usually retains the individual at work who would otherwise have to have treatment outside and thereby lose from an hour or two, to half a day, or perhaps longer.

The work of our dentist is confined to giving relief in cases of toothache, giving advice, making examinations, charts, and when necessary, making X-Ray plates for employees to take to their own dentist, and the cleaning of teeth.

We consider that it increases efficiency inasmuch as an improved physical condition is bound to have this effect.

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It has been of undoubted benefit to numbers of our employees, whose appreciation is evidenced by the numbers who take advantage of it.

Yours truly,

THE T. EATON CO., LIMITED,

R.

Per *P. L. Reid.*

THE FORD MOTOR Co., Detroit, say:

Will state that the dental work done at this plant so far has been very limited. We have had one dentist for the past year who devotes his time exclusively to dental work called for through injuries received by employees while at work, and to the inspection given to employees who come under our observation requiring dental attention.

It is impossible to definitely estimate the good done by this department, but to date we have no cause to regret the installation of the dental department, and contemplate increasing its scope in the future.

Respectfully,

J. E. MEAD,

JEM:HER.

Chief Surgeon.

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H. J. HEINZ Co., Pittsburg, say:

We can not give specific answers to your questions, because none of our welfare features was ever undertaken with the conscious purpose of improving our output or our profits. When we add any new feature for the benefit of employees, the determining factor is whether the employees will be interested and will take advantage. Consequently, we have never figured the dollars and cents value of our Dental Department, or made any observation as to reduction of lost time.

The department is in charge of a graduate, experienced dentist, who does all sorts of dental work except bridgework. This work is done on the Company's time and at the Company's expense. We do feel, however, that more important than dental surgery is instruction in oral hygiene, and so our man always teaches his patients the use of the toothbrush and of dentifrices. This element of the work extends beyond the factory, for the employees carry into their homes and to the neighborhood the gospel of the toothbrush.

Yours very truly,

H. J. HEINZ COMPANY,

CFO:M

By *C. F. Ohliger.*



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THE NARROW FABRIC Co., Reading, say:

It is, of course, exceedingly difficult to measure the benefits derived from a department of this kind. However, we do know that we are experiencing a gradual and consistent increase in the personal efficiency of our employees, in the decrease in illness, absenteeism, and other evils which decrease production.

In most instances, we have arranged for a regular semi-annual examination of the teeth of our employees. In this way the cavities are discovered before they have progressed very far. Inasmuch as this results, of course, in the preservation of the natural teeth, the beneficial effects in the personal health and efficiency of the employee inevitably follow.

We can say, without reservation, that the results fully equal our expectations; that it has reduced the number of hours lost through illness, and has, consequently, increased to that extent, the output of the mill. While, of course, dentistry is not quite as vitally needed to take care of accident cases or persons suffering from acute illnesses, nevertheless, we believe that in the long run, preventative dentistry is as important as medicine,

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and that it frequently prevents the necessity of resorting to the latter.

Respectfully,

THE NARROW FABRIC COMPANY,

JEK:EVF

*J. E. Kissinger.*

THE NATIONAL CASH REGISTER Co., Dayton, say:

We realize that it has been of material benefit to those employees who have received treatment, and without a doubt is as necessary as the medical treatment.

Yours truly,

W. A. PEARSON,

RNH:CW

Welfare Dept.

D. H. HOLMES Co., LTD., New Orleans, say:

Our dentist, Dr. J. S. Hull, spends two hours, from 8:30 to 10:30 a. m., with us. Every employee knows that he or she is welcome to dental service. However, it is the duty of the welfare secretary to see that attention is given to the teeth whether the store dentist is used or not, and to urge the employees to keep their appointments with the dentist.

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Even at the beginning the response on the part of the employees was gratifying, but it was necessary to urge in many cases that the appointment be kept. We do not insist that our dentist be used, but we do insist that care be taken of the teeth.

Our reports show that 72 per cent. of our employees make use of our dentist. Most of the work has been general filling and treatment. The dentist found many bad cases of neglect, but on the whole we were surprised at the prompt response which met our dental offer. The equipping of our dental office was our greatest expense.

We pay for all materials used and we find that we are more than repaid. We consider that most diseases are enhanced, if not produced, by bad teeth. Our general health has improved and we lay a great part of this improvement at the door of the dentist's office.

The instructing in dental hygiene and the advice about toothbrushes, etc., is left entirely to the dentist, although throughout the year at least three lectures on the teeth have been given for the benefit of all the employees in the store.

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Our dentist's report for the last six months is most gratifying and shows that the teeth of a large per cent. of our nine hundred employees are being examined and properly attended to semi-annually.

We are very happy to tell you of this work.

Very truly yours,  
D. H. HOLMES Co., LTD.

*Per Lois Janvier,*

LJ:AD.

Welfare Secretary.

To my second questionnaire mailed August, 1921, the following very interesting replies were received. These are but a few who replied to this questionnaire but as space does not permit publishing all I trust it will be understood that while I can not publish all of them here, the valuable information contained in the replies not printed has helped me

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to present this very important subject in a much better form.\*

A. G. SPALDING & BROS. say:

A. G. Spalding & Bros. completed the re-organization of their Medical Departments by establishment of a Dental Clinic April 1, 1920.

The Medical Department had existed as such for five years previous, and the need of dental work impressed itself upon us from the data obtained in examining groups of men for employment. At least eighty per cent. of the industrial classes required some form of dental work. Probably not more than twenty per cent. of this class understand the value of dental prophylaxis, and more than this number make daily use of the toothbrush or cleansing preparations.

When one sees large groups of men from this class of society you are impressed by their premature age. Many have suffered lost time and efficiency

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\*These letters are for the exclusive use of this book only and are answers to my questionnaire of August, 1921.

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from the rheumatic group of diseases. Stomach and intestinal disorders are common. Early arteriosclerosis is a very common disease. If industrial medicine is going to make any improvement among this class of people the work must be complete in all details. We felt that if we hoped to accomplish anything material in preventative medicine a dental department connected with our plant hospital was essential. It saves the lost time of labor seeking dental appointments far from their work. It prevents the worthy case from going astray in the selection of a high grade dentist, and by having a dentist on duty within the plant the lesson of dental hygiene is more early impressed and his services are much more likely to be sought.

The clinic is situated in a room in our plant hospital, outfitted with the most modern and complete equipment procurable. A local dentist of high repute devotes four hours of his morning daily to the work. All work is provided free, the man losing only the time; since sixty per cent. of the force is on a piece-work basis. The cost to the company for the free dental work is mini-

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mized to the cost of upkeep of our welfare departments. The foremost thought in all of this dental work is the teaching of oral hygiene. The dentist explains to each case while in the chair the importance of good teeth, and how they may be preserved.

It is always difficult to transpose any form of welfare work to a basis of dollars or labor hours. If the labor turnover can be cut, and increased labor efficiency obtained through the welfare medical work, the expense as a capital item has been justified. We feel that a dental department has paid for itself in the way it has been accepted by our employees. The idea to them is a popular one, their support is our index of approval. During the nine months of 1920 there were 1,312 dental appointments, 87 extractions, 167 cleanings, 972 fillings and 95 treatments.

To us the installation of this department has been highly satisfactory. It is appreciated by the employees and there is no suggestion of a discontinuance of this department.

Very truly yours,

P. M. CORT,  
Medical Director.

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HOOD RUBBER Co. say:

1. How or through which primary cause was your Dental Clinic established?

Answer: It became evident that in order to treat diseases of the human anatomy that it was necessary to consider the oral cavity a part of the body, and treat diseases of same as in any other area. Therefore, medical and surgical dentistry was applied to our service.

2. Is Dental Clinic being operated as part of the Medical Department? If not, in what particular or definite way does it fit in with your Industrial (or Hospital) Service?

Answer: Yes.

3. Cite at least six (6) serious cases of systemic disorders diagnosed through condition of teeth and mouth (X-ray) and then corrected or cured primarily by Dental Clinic.

Answer: Many cases of arthritis, general debility and toxic poisoning.

4. How many cases per month do you refer to your Dental Radiographer?

Answer: About fifty.



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5. Is your Dental Clinic—operated either as a part of the Medical or as a distinct unit of the Industrial (Hospital) Service—a paying proposition? Can you state or estimate approximately the annual saving in labor hours or dollars? Also give average number of employees.

Answer: (a) Yes, from a standpoint of service rendered. (b) No. (c) 8,500 employees.

Am enclosing answers to questionnaire which you mailed to Hood Rubber Company for answers. Your letter was referred to me and trust they are satisfactory.

Respectfully yours,  
ROBT. R. RICH, D.M.D.,  
Dental Director.

THE METROPOLITAN LIFE INSURANCE CO.  
say:

Your letter and questionnaire dated August 12th have been referred to me for answer, and I hope the following information will be of value to you in your work.

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Question 1. The following was published in the Daily Bulletin, February 7, 1915:

"As announced by the Vice-President last year in his addresses to the Home Office staff, the Company proposed to establish a modern, up-to-date dental clinic, in which opportunity will be given to the Home Office employees to have their teeth examined and cleansed by a competent corps of dentists, without cost. This is the outcome of a suggestion originating with the Welfare Division, which met with the cordial approval of the Medical Division.

"If additional treatment, such as fillings, etc., is necessary, it is expected that this will be done by the employee's regular dentists.

"The Company believes it desirable to have such a clinic, as it has been proven that many illnesses have their origin in the mouth, and that small cavities in the teeth, the existence of which are unsuspected, contain large numbers of disease germs, such as diphtheria, pneumonia and tuberculosis. Clean and polished teeth do not decay.

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“In order that the Company may definitely decide whether to arrange for such a dental clinic, it is necessary to know how many of the Home Office employees will avail themselves of the service. All employees are, therefore, requested to inform their section heads, whether they desire to take advantage of the opportunity which will be given to them if the dental clinic is established.”

The following appeared in the Daily Bulletin, April 29, 1919:

“The services rendered by the Dental Division since its establishment in 1915 have been so curative of impaired health conditions and so permanently helpful to the employees who have taken advantage of the opportunities offered, that henceforth, every Home Office employee will be required to undergo examination and cleansing of the teeth in the Home Office Dental Division twice a year. If the services of the family dentist is desired rather than that of the Home Office dentists, such examinations and cleansings by him will be accepted, but they must be procured without expense to the Company and the employees must furnish a satisfactory certificate

## *Modern Dentistry*

from him that the required work has been done."

Question 5. In an estimate published by the International Harvester Company, the hours consumed for an employee to go to the dentist figure at four hours loss per treatment, because so often the employee would take one-half a day off for this purpose. The following estimates are based on the theory that an employee will return after treatment has been given or appointments are made at such times as to cut down the lost time. In other words, we figure each treatment is two hours loss to the Company.

In 1920 there were 7,165 prophylactic treatments, 1,800 emergency treatments, 1,086 patients had X-ray pictures taken. Figuring two hours for each of these treatments, time consumed would be 20,102 hours. Time consumed in doing this work at the Home Office Dental Division: Prophylactic, 6,267 hours, emergency, 300 hours, X-ray, 1,662 hours, total, 8,229 hours, making a saving in time of 11,873 hours. There are 7,500 employees in the Company and sixteen in the Dental Division.

## *Modern Dentistry*

We are very much interested in the work that you are operating for Industrial Dentistry, and shall be very glad to keep in close touch with you, giving you any information that we may possess to help you in this work.

Very truly yours,

ARTHUR M. HUNTER,  
Assistant Dental Director.

LIT BROS., Philadelphia, say:

We are enclosing herewith Report of Dental Clinic installed as part of the Medical Department, which has been filled out as per your request.

### QUESTIONNAIRE

1. How or through which primary cause was your Dental Clinic established?

As a necessity to our Medical and Surgical Department.

2. Is Dental Clinic being operated as part of the Medical Department? If not, in what particular or definite way does it fit in with your Industrial (or Hospital) Service?

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It is operated as part of Medical Department.

3. Cite at least six (6) serious cases of systemic disorders diagnosed through condition of teeth and mouth (X-ray) and then corrected or cured primarily by Dental Clinic.

Impaired hearing, headache, heart, stomach, neuralgia due to impacted teeth, septic poisoning due to abscesses.

4. How many cases per month do you refer to your Dental Radiographer?

Ten to fifteen.

Yours very truly,

LIT BROTHERS.

COLGATE & Co. say:

In the summer of 1916, Colgate & Co. established a Dental Clinic. The purposes were:

1. To give our employees an opportunity to have their teeth thoroughly cleansed and polished.

2. To teach them the importance of a clean and healthy mouth and to instruct them in the best method of using the toothbrush.

3. To call to their attention such conditions as need the services of a dentist.

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The original work undertaken by the Clinic has not been changed. It consisted of prophylaxis, polishing of the teeth, removal of decayed or ulcerated tooth roots and necessary emergency work. Fillings, crowns, bridges and other dental work is not undertaken, the patients being directed to their own dentist.

The equipment of the Dental Clinic comprises two chairs, the necessary sterilizers and full dental equipment except a radiograph outfit. For this work arrangements are made outside. The staff comprises at present one dentist continually on the floor, a trained nurse and one girl doing clerical work.

The Clinic is for the free use of any employee of Colgate & Co. The time spent at the Dental Clinic is not charged to the employees, nor are they compelled to visit the Clinic. An idea of the average amount of work accomplished may be obtained from the total number for one month: Cleanings and examinations, 149; emergency (toothache, etc.), 33; pyorrhea, 7; extractions, 88.

Yours very truly,

COLGATE & COMPANY.

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ENDICOTT-JOHNSON CORPORATION say:

1. How or through which primary cause was your Dental Clinic established?

Dentists were added to our Medical Department at the urgent request and advice of our doctors, of which we have eighteen. In our work they found many cases which required the attention of a dentist. Until such attention was received they felt that their efforts were largely unavailing.

2. Is Dental Clinic being operated as part of the Medical Department. If not, in what particular or definite way does it fit in with your Industrial (or Hospital) Service?

Our Dental Department is a branch of our Medical Department. The dental work is, however, a distinct feature.

3. Cite at least six (6) serious cases of systemic disorders diagnosed through condition of teeth and mouth (X-ray) and then corrected or cured primarily by Dental Clinic.

Rheumatism, neuralgia, pyorrhea, empyema of the antrum and neuritis.

4. How many cases per month do you refer to your Dental Radiographer?



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Thirty or forty.

5. Is your Dental Clinic—operated either as a part of the Medical or as a distinct unit of the Industrial (Hospital) Service—a paying proposition? Can you state or estimate approximately the annual saving in labor hours or dollars? Also give average number of employees.

All of our service is without charge to our workers and the dependent members of their families. We have an average employment of about 12,000 people. No record or estimate could be given of the time saved to the industry by our Dental Department.

NOTE—Our Dental Department has only been organized about one year. At the present time we have two dentists. The work done included extractions, fillings and prophylactic work. All of this is without charge, the same as our Medical Department service.

Very truly yours,

ENDICOTT-JOHNSON

WORKERS' MEDICAL & RELIEF,

THP:M

T. H. Platt.

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### BABSON'S STATISTICAL ORGANIZATION say:

This Organization believes that oral prophylaxis is an essential to business efficiency, and we therefore established our dental clinic in November, 1917. It is under the supervision of Dr. George H. Wright, of Boston, who visits the clinic at stated intervals. This clinic is operated as one branch of our Personnel Department, and we have a dental hygienist in charge whose duty it is to examine the mouths of each employee every six weeks, reporting to such employee any condition needing dental attention, also giving the teeth a thorough prophylactic treatment. Upon entering the Organization, each new employee must have his teeth examined and cleaned by the hygienist before his application can be finally approved.

We consider our dental clinic a "paying proposition" inasmuch as it has improved the condition of the mouths of those employed, has given them more knowledge as to the proper care of the teeth and has lowered the percentage of absentees by preventing those diseases caused by an unhealthy mouth.

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Our average number of employees is two hundred and sixty; average number of prophylactic treatments a year is sixteen hundred, and the average number of examinations of new employees a year is fifty.

If we can give you any further information, we will be very glad to do so.

Sincerely yours,

NANA M. DOUGHERTY,

Secretary to Mr. Babson.

THE R. K. LEBLOND MACHINE TOOL  
COMPANY PLANT AT OAKLEY, CIN-  
CINNATI, say:

The Dental Department is under the supervision of Dr. J. P. Becker, a dentist who spends one hour a day at the plant. The Dental Department consists of a room, 8x10 in size, equipped with an industrial unit, cabinet, file, gas-oxygen outfit, and the usual small tools and appliances for performing extractions and prophylactic work. This department was equipped and furnished at a cost of approximately \$1,800. The dentist is assisted by a nurse, whose business it is to do the necessary clerical work, chart the patient's mouth, sterilize the instruments after each patient, and

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anticipate the wants of the dentist. With the help of a nurse the dentist is enabled to treat a great many more patients than he could without her assistance. His business is to examine the mouths of all of our employes periodically, with the view of keeping the mouth in a hygienic condition. He also gives instructions as to the proper use of the toothbrush and dental literature by which the patient may discover the first symptoms of decay. We believe that if each employe co-operates with the dentist and at once consults his family dentist to have the needed work done, a maximum of efficiency will be maintained.

There were 1,506 mouths examined and charted during the year. Our records show that 96 per cent. were in need of dental services; only 4 per cent. were found to have clean mouths; 6 per cent. were free from caries and responded to treatment readily; the remainder had disease-producing symptoms known to dentistry, such as abscesses, pulp stones, inflamed pulp, ill-fitting crowns, and ragged fillings, causing irritation.

The approximate cost per employe was \$1.12. Of the economic value of a

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dental dispensary there can be no question. The estimated saving to the company on extractions alone for the past year may be conservatively figured at approximately \$2,200 in production.

Yours truly,

SANDFORD DEHART,  
Director of Hospital.

The fire insurance business has recognized the value of periodical inspection in the reduction of fires. This has increased the insurance business and reduced the number of fires, and reduced the liability to fires. Instead of allowing the fire conditions to run down, producing greater and greater liability of fire and consequent increase of rate for carrying the risk, the companies make at their periodical examination of premises recommendations of improvements and clean-

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up that will reduce the fire risk; also the fire liability; also all new building has to conform to certain requirements for fire proofing. The insurance companies have realized that their work in reimbursing fire losses on insured property, also consists in preventing fires as far as is possible. Welfare work is very similar. Instead of waiting to repair the damage which certain conditions are gradually bringing about, modern welfare workers realize the value of preventing the damage before it comes and of intercepting the process.

As a brief summary of the dental service plan from which the above-mentioned companies

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are deriving such good results, let me conclude by outlining their system. Dental troubles fall into a class that can be readily prevented if caught in time, but are sure to accrue if not detected. Dental prevention consists of having the dentist examine each patient periodically, about twice a year, and note on a chart the condition of each tooth, directing the patients to their family dentist for needed work, if any, and checking the work when it is done. That is, seeing that the work is done. The dentist does first aid work, relieves toothache, performs treatment that would require numerous trips to the family dentist and consequent loss of operative time, prevents

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excuses for toothache. There are many systemic conditions in the duration of which operatives lack pep, which are due to conditions of the teeth. As operatives are not aware of this cause, their dentist is not ordinarily brought in to consultation until too late. The industrial plan of having the industrial clinician call in the patient as a welfare feature of the establishment has made it possible to correct these systemic conditions before doing great damage, and the result has been greater regularity in attendance, better health, greater number of operating hours given to employment. As most companies have adopted dentistry from an educational standpoint,



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they have not kept data on percentages of increase derived from that source, but you can see from the above expressions in their letters what their views are after use of the system. They class the results as intangible because what Preventative Dentistry prevents, never happens. It is like the fire that is prevented by certain recommendations and precautions, the prevented loss of which is impossible to estimate. The only difference is that in Preventative Dentistry, the thing at stake is health and efficiency.

Dentistry in the factory is placing at the disposal of the operatives information and experience of the dental profession collected over the past fifty

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years. Of course there are things about it that the patient would not know, but the welfare department offers it gratis with the assurance that it is the right thing to do, knowing as it does, the benefits the operatives will derive from it. Corporation dentistry is a growing subject, and after reflecting what might have been if you yourself have lost some teeth which some prevention would have saved, the subject will take hold and leave you convinced that it is a good thing. Preventative Dentistry produces industrial health.\*

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\* Consider all the loss of time, loss of money and loss of health due to the defective tooth conditions as outlined in these letters and as outlined in the chapter "Tooth Troubles in Their Relation to Systemic Troubles," and you have the sum total of the value of Preventive Dentistry, which can prevent these conditions from developing.

## CHAPTER V

### TOOTH TROUBLES AND THEIR RELATION TO SYSTEMIC TROUBLES

#### VALUE OF DENTAL SERVICE

The mouth is one of the three points at which systemic disease has its inception. The other two are the tonsils and the nasal cavity. In considering the decay of a tooth or the abscess at the base of a devitalized tooth or the pyorrhea condition of the gums, the laity lose sight of the intimate relationship of these conditions to other parts of the body. This is due to the lack of public information on this subject and also to the painless or relatively painless condition of the teeth and gums,

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when in this condition, in contrast to the pain and inconvenience experienced in other parts of the body during the time the exciting cause is allowed to run undetected.

Dr. Duke, of Kansas City, Missouri, has made a long series of clinical observations on this subject, and reports presence of streptococci bacteria in the blood of people having abscessed teeth. These bacteria affect the heart and are known to be the bacteria of joint inflammation—rheumatism. Physicians have recognized that these same conditions are brought on by septic formation in the tonsils. The tonsils have had their share of investigation, and the operation of removal of

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the tonsils has become a necessary and popular one wherever the tonsils can not be made normal by treatment. The tonsils have also been found to be a cause of deafness. Likewise the tooth poison from the abscess going directly into the blood produces deafness, and in some cases defective eyesight. The streptococci take up their work where the patient is weakest, or in some part that is below normal at the time the streptococci get into the blood stream from the tooth abscess. The liver is another point of attack. So there are quite a number of systemic organs that are directly affected by the poison of pus from the tooth abscess.

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Dr. Hartzell, of Minneapolis, Minnesota, has long been an original investigator of the phenomena of Systemic Disorders Due to Defective Mouth Conditions. On account of his ability and inclination in following up this subject he was given the task of reporting on this subject for the Research Branch of the American Dental Association. Dr. Hartzell was the first American doctor and dentist (he is both) to show the connection between the abscessed tooth and rheumatism. He has made complete explanation of this and also reports, as does Dr. Duke, that the following systemic diseases, rheumatism, arthritis, neuritis, iritis and other eye inflammations, vegeta-

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tive endocarditis, myocarditis, peritonitis, meningitis, gastric and duodenal ulcer, pancreatitis, pneumonia, pleurisy, etc., are often of streptococcic origin due to direct infection from chronic points of infection (foci) as pyorrhea and abscessed teeth.

Dr. Hoff, of Ann Arbor, Michigan, reports that it has long been supposed that rheumatism was the result of infection, but nothing definite as to the source of the infection was clearly made out until recent years. As most internal infections have of late been connected in some way with the nose, mouth and throat, much experimentation has resulted in tracing these infections directly to the tonsils and teeth. At first

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it was thought that the infection was taken into the system through the stomach and alimentary canal, from open sores in the tonsils, and suppurating gums, alveolar abscesses, etc. But, as all such infection would be subjected to the destructive influence, as the gastric and intestinal juices before absorption, it does not seem probable that there could be enough of the active virus absorbed through this means to account for the exterior disturbances often encountered. At the present time it is believed that so far as the teeth and tonsils are at fault the infectious virus is absorbed directly from the tissues by the absorbent vessels and is carried through the lymph and



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blood vessels to the joints and muscle tissues where it is deposited or finds favorable conditions for development, and so local points of disease are established in various tissues throughout the body where conditions favor development of these micro-organisms which cause this particular disease. It is usual to find rheumatism affections in the joints and muscle tissues, which become pathologic, that is painful, or even in some instances abscessed. If it should locate for instance, as it frequently does, in the heart muscle, it becomes a most serious affection and may be fatal in a short time; or in some other tissue not so highly specialized, it may assume

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chronic form and only annoy without fatal results.

Dr. Goadby, of England, in 1912, reported his observations on Oral Sepsis, and his findings were the same as those already mentioned. The pus in the abscess at the root of a tooth is pressed by force of the jaw pressure in eating and gains entry into the blood by veins and arteries that surround the pus sack. At every mealtime this occurs similar to a hypodermic of streptococci three times a day. This process goes on unthought of by the patient. The rheumatism, the low pulse, low blood count, headache, are doctored for the malady, not for the removal of the cause, unless the physician has the patient con-

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sult the dentist. In the case of a blind abscess under a filled devitalized tooth or teeth an X-Ray would disclose the abscess. In pyorrhea conditions the spongy gums and pus pockets would be observable to the eye. The ingress into the blood direct from tooth abscess of such regular amounts of streptococcus and staphylococcus bacteria lower the value of the blood, cause it to be less vital, and the heart becomes weaker and altered in action, taking the pep out of the patient. In severe cases vegetative endocarditis takes place. The picture of this condition of the heart looks like cobwebs stretched all across every way over the valves.

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Dr. Barber, of Chicago, Illinois, has written at length upon the value of good teeth as the necessary requisite for good health through good digestion. Many people by loss of teeth, through decay and extraction, have not enough teeth to properly masticate the required food. In some cases the articulation of the teeth has changed, so that occluding teeth do not actually touch each other in biting. This allows the food to go to the stomach in an indigestible form and makes digestion incomplete, causing indigestion. This brings up the case of Horace Fletcher, a member of the American Association for the Advancement of Science, who on account of indigestion was at fifty

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given up to die. He went to his dentist and was advised to have his teeth regulated so he could properly masticate the food and obtain one hundred per cent. digestion. With this done he paid particular mental attention to his eating, seeing to it that he did not swallow the food until he had thoroughly chewed it. He wrote some about this subject also and the newspapers took it up, and this publicity resulted in the expression "Fletcherize." Mr. Fletcher at last reports was over seventy.\*

The foregoing points very plainly to the value of Preventative Dentistry, and as already explained elsewhere to do this it is

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\* He has since passed away while in war work in France.

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necessary to call the patient periodically and perform the dental prophylaxis. Greater public education is needed on the value of this work. It is so easy to prevent dental troubles, but after they have gained a start it takes an operation to stop them. Prevention through periodical prophylaxis is the best system.

## CHAPTER VI

### THE POSSIBLE NEW LIFE POLICY

Life insurance performs a national service by providing for the families of insured persons after death of the insured, returning a lump sum amount in cash representing in various degrees the insured's earning power. On policies with health indemnity clauses there is a payment for the duration of the sickness depending upon the terms of the particular policy. These two operations of insurance companies do much toward keeping the mechanism of business turning, besides benefitting dependents of the insured.

The next step would seem to be to pay attention to the insured

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during life with an advisory and first-aid service pertaining to his health. Also to providing through the operations of the same service of an enlarged field for insurance by bringing the health of applicants up to the point of an insurance risk.

As my allotted subject is to point out the importance of Dentistry in this respect, I will mention the value of health service in localities where much insurance is already written or intended to be written. This service is of much value to the insured and indirectly to his dependents. Every medical clinic of this kind would do well to have at least one unit of dental equipment and at least one dental



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clinician besides the attending physician and nurse.

At the present time the populace are only ten per cent. sold on the subject of Dentistry and much less per cent. sold on the subject of Preventive Dentistry leaving very great the possibilities to increase the health of the nation and to reduce the death rate through prevention of dental troubles, especially through the systemic disorders which arise in the teeth and gums as foci of infection. That is another way of stating that the people do not realize the intimate relationship that exists between the teeth and the general human system. They do not realize how important a part of the human anatomy the

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teeth are. If it is understood that the four cylinders of the heart are in constant automatic operation and that one pair of valves take the venous blood from the system and drives it through the lungs, and the other pair take the then arterial blood from the lungs and drives it through the body system from which it returns to repeat the cycle, then it can be easily understood how blood circulating around abscessed teeth carries the infection at once to the heart and the next moment to the arms, fingers, limbs, feet, intestinal regions, and head. Under the influence of bacteria in the blood from abscessed teeth and pyorrhea gums the heart is not normal

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and often excludes the applicant for insurance from a clean record on his heart to the extent that he is declined as a risk. This condition can be corrected by dental attention and upon a subsequent test of the heart the applicant could be accepted.

The dangerous systemic infection at an abscessed tooth or pyorrhea gums often is held back by the natural health of the patient until some fever reduces his resistance, at which time the infection gains headway, or heart-way in this instance, in the blood, and complications set in. The regular list of bacterial infection diseases results from tooth infection such as arthritis, pneumonia, myocarditis, endocarditis, peri-

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tonitis, gastric ulcer, pancreatitis, pleurisy, nephritis, iritis, meningitis, rheumatism, also deafness and insanity.

A dollar spent in prevention saves large amounts in cure or relief. You have no doubt heard or read of persons contracting a cold or grip and the developments leading into one or more of the above catagories. The teeth play their proportional part in this infection the same as do the tonsils, throat, and nose. Dentistry is a health profession, a highly developed specialist branch of medicine, and has an important field in the preservation of health.

The first-aid health service should comprise the kind of supervision that would enable the

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insured to live his natural term of life in which the organism naturally wears out, not permitting a part, such as a tooth, to wear out and through neglect to poison the whole system and cause the death.

Inasmuch as the mortality tables are compiled from actual death statistics and the load in the premium is based on the cost of operating insurance companies, it is possible by bringing a larger number of applicants within the requirements of the insurance risk to greatly increase the number on whom insurance can be written without much increased cost of procuring this additional business.

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Another idea is the tooth examination of the applicant for life insurance. The plan that seems best to the writer's mind is to have one or more dental clinicians in every locality just the same as you have one or more physicians in every locality. The dental clinician according to this plan would make a prophylaxis and tooth examination both instrumental and by X-ray of each applicant and render the dental recommendations on a formal card. The applicant could then have his family dentist put his teeth in order according to the recommendations outlined by the insurance dental clinician and then return to the insurance dental clinician to have the work checked up. The card

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with the O. K. could then be turned in along with the medical examination card.

A popular opinion about the teeth is that not until a tooth aches is it time to go to the dentist. This is just inverse of the truth. It is then too late as the pain announces the arrival of the danger point, and in many cases only an operation can prevent serious trouble. Periodical prophylaxis intercepts the process of decay and discovers the formation of pyorrhea and abscesses while they are still in a curable stage, without the accruing of systemic maladies or unnecessary loss of the serviceability of the teeth.

The payment of life insurance premiums by a policy holder is

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his financial prophylaxis, a prevention from leaving his dependents in want. Health prophylaxis is the next subject that should interest him. He should intercept the forces which are at work and which only announce their presence too late by pain. The fear and pain connected with Dentistry are not the dentist's fault. By going to the dentist periodically all pain is avoided, health is maintained, and natural teeth are preserved for old age.

With health service alongside, life insurance would mean preservation of life, besides payment of an indemnity at death. It is possible to give a health service along with life insurance poli-



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cies, or at least health directions at the writing of the insurance, applicable to the individual, that would materially lengthen the life of the insured. And it is possible by clinical first-aid health service and health restorative recommendations to greatly increase the number of available life insurance risks.

Summarizing the foregoing, it is possible through Dentistry to increase the number of holders of life insurance policies and to lengthen the life of policies in force, and to reduce the claims on sick and debility clauses. It is besides evident that a clean tooth certificate from the dental clinician is very desirable, because so many contractable diseases are traceable to the teeth.

## CHAPTER VII

### DENTISTRY IN THE HOSPITAL

Dental service is necessary along with medical service in healing systemic disease. Administration of certain drugs require previous dental attention and removal of dental foci of infection for safety.

In order to know all the conditions affecting a patient at the hospital, it is necessary not to leave out any of the tests, as such an omission may lead to an erroneous diagnosis. In quite a number of cases the neglect to examine the mouth and teeth, both instrumentally and by X-Ray, is decidedly incomplete diagnosis. Hospitals in which the installa-

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tion of dental equipment originally was made for care of fracture of the maxillary and practice of oral surgery, have recognized that there is more general use of the dental service than was originally expected. The relationship of the teeth to systemic diseases as foci of infection, or at least as relay posts from which the infection is increased, has so repeatedly been demonstrated that most physicians recognize it as a valuable element in their diagnosis. In the light of the present knowledge of this subject the examination of the mouth condition of the patient is valuable data in determining the treatment of the patient while in the hospital.

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This examination is called odontalysis. Whether the odontalysis shows pyorrhea, alveolar abscess, blind abscess, impacted unerupted teeth or not, it becomes important information of conditions, as it tells whether the teeth can be counted in the treatment to follow, or eliminated from consideration. Besides oral surgery and examination for tooth foci of infection, dentistry in the hospital is very valuable for preparing maternity cases, as all unhealthful conditions of the teeth of prospective mothers should have immediate dental care and treatment. It is eminently best for both the mother and the offspring that all conditions which lower the vitality and have such

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influence upon the purity of the blood be corrected to normal before confinement.

The care of children's teeth is a subject which also receives much attention in the hospitals using dental service. Non-attention to children's teeth is regretted by parents and relatives in after years, when it is a difficult matter to make corrections of irregularities which in childhood and youth could have been made very easily. This work has a direct bearing upon the child's health also, and can, when promptly attended to, have much to do with the child's future health. It is a function of hospital dental service that should receive application to all children

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cases which come under the influence of the hospital authorities. In such cases the work is preventive dentistry, inasmuch as the proper correction and care in childhood prevents serious dental troubles and impaired health in adult life.

The treatment of cases in which the remedies prescribed are arsenic, iodides, mercury, phosphorus, requires dental attention, as the effects of the use of these drugs is to stir up latent infection. As the mouth condition of such patients may respond to the action of these drugs complicating systemic conditions, dental care becomes necessary.

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Difficult extractions under anesthesia is another facility which a Hospital Dental Clinic affords. One of the important features of the treatment of pulmonary tuberculosis is the filling of all tooth cavities and maintenance of oral hygiene. There are calls for many operations for impacted teeth or what might be called miscarriage of the teeth. Patients suffer very often, believing the trouble in other parts of the body, as the nervous system is deranged by pressure of the tooth on a nerve in its endeavor to erupt. This is generally called a neuralgia, or in other words, a pain, which does not explain it at all. The Hospital Dental Clinician can

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generally locate the offending tooth by having an X-Ray picture taken, which will disclose the tooth below the gum in an inclined or horizontal position.

An important part of hospital dental work is the great opportunity for research work. Cases offered at a hospital in the dental department are different in some ways than those offered in a private dental practice. More oral surgery and malignant systemic cases come under hospital dental attention than come into a private practice. Treatments, fillings, artificial teeth and bridge-work are called for, but not so much as in private practice. The unusual cases which a general hospital receives offer great



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opportunities for dental observation and research work. This work, of course, is very interesting to dental clinicians.

During a recent visit to the Jewish Hospital in Cincinnati, where they have a dental clinic, the writer was shown the hospital card on which the tooth condition of all patients is recorded. All findings are recorded thereon and furnish data which very often help the hospital board, together with the records placed on the same card by physicians and specialists in the hospital's other departments, in arriving at the correct diagnosis and subsequent relief and restoration of the patient to full health and usefulness. The supervisor, ex-

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plained, it is not enough to place the patient on his feet, but to restore the patient to his or her normal self, if possible, is the aim of the hospital, and it takes an analysis from all departments to properly do it. Another work performed by the dental clinic at the Jewish Hospital is the care of children's teeth, the advantages of which all welfare authorities readily recognize. This work is part of the oral hygiene movement which is so active in all parts of the United States.

Besides the hospital dental work above outlined, research work in dental pathology and dental bacteriology is carried on in connection with cases presenting at the hospital. This work

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has shown valuable results and has been of much benefit to the patients treated at the hospital.

A LETTER FROM THE JEWISH HOSPITAL  
says:

Answering your letter of inquiry of the 15th inst., in reference to our Dental Department, would say:

It is my opinion that no first-class hospital can operate without complete dental equipment installed in a room for that purpose.

The Jewish Hospital is fortunate in having such a room, and is therefore, enabled to give the best of care to our free patients and also service to members of the Staff or outside Doctors who may have private cases that need special dental attention.

Our Dental Department consists of two Seniors and two Juniors who are well-known Dentists of this city. They give special attention to our Clinic patients and co-operate with their Colleagues on the Medical Staff. They make rounds daily, examine the mouths and

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teeth of all free patients, order X-rays and extract teeth where necessary. Their expert opinion is of great aid to the Internal Medicine men in making the proper diagnosis.

They extract teeth in this special Dental Department and also give special treatment to the patients.

Extraordinary Surgical Dentistry is performed in the Surgical Pavilion. Other ordinary cases are handled in our Dental Room.

The Dentists also see that each free patient uses the toothbrush and cleanser that is furnished them on admission to the Hospital.

To my mind, the Dental Department is an extremely important adjunct to this Hospital, and I would heartily recommend a similar one for all institutions.

Very truly yours,

L. M. LEVY,  
Superintendent.

A visit was also made at the Cincinnati General Hospital, where a tour of the dental

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department was made. Patients arriving at the hospital for diagnosis and treatment are taken to the dental clinic at the direction of the attending physician. If the patient is unable to walk, a wheeled chair or a wheeled stretcher is used to convey the patient there. After the instrumental examination of the teeth, the dental clinician sends the patient to the X-Ray department for a complete dental roentgenographic examination. They take ten films, five upper and five lower, covering the complete mouth, using one of their large machines on a two and one-half spark gap. The developed films are returned to the dental department and together with

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the clinical report thereon sent to the attending physician with the dental recommendations for the case. The dental diagnosis, along with the attending physician's diagnosis of symptoms and other tests, such as urinalysis, bacteriological, etc., make up the case history, which is kept on an indexed chart or card. In all cases the clearing up of mouth conditions accelerates recovery from the systemic conditions. Part of every day is devoted to the care of children's teeth at the Cincinnati Hospital. Children from the city and neighborhood are brought to the hospital and given treatment. Care of their teeth is along preventive lines and correction of irreg-

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ularities and dental advice to the parents. Children from five years up receive this attention and learn the value of care of the teeth.

Oral surgery is performed for all cases coming to the hospital and receive immediate attention by the skilled operatives in the dental department.

Dentistry in the hospital has shown its value in so many ways and so many patients arriving at the hospital require dental care that the department is very much in demand.

**THE CINCINNATI GENERAL HOSPITAL**  
says:

The Cincinnati General Hospital has had for many years dental representation. Before the present hospital was built one or two dentists served (by appointment), whose duty it was to

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attend patients when called upon by the Superintendent or other staff officers of the hospital, and at only such times were they expected to visit. The first consulting dentist was appointed in 1897 and served for many years until the completion of the new hospital, at which time he resigned.

When the new Cincinnati General Hospital was established they built within the Surgical Building a Dental Department. This department consists of a large, well-lighted operating room, sterilizing room, laboratory, waiting room, experimental laboratory and dressing room for staff officers and internes, all thoroughly equipped by the hospital except the operating room, which was completely and beautifully equipped by Senator Richard P. Ernst, of Covington, Ky. Up to the present time it is the most complete Dental Department of any municipal hospital in the country.

At the completion of this department there was then established a complete dental staff, consisting of Director of Dental Service, Assistant Director of Dental Service, Attending Dental Sur-



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geons, the number of which has now grown to eight, two Consulting Dentists, two Internes who live at the hospital and are subject to call at all hours, one Orderly and one Dental Nurse.

The Dental Department is entirely separate from any other department in the hospital and is governed entirely by the above staff of officers.

It obtains its patients from three sources:

1. Through the Receiving Ward, when patients are admitted into the hospital to be retained for service.

2. Through the Out-Patient Dispensary, coming in for treatment but not retained in the hospital.

3. Those referred from other services or consultations.

The services given in this department under directions of the Staff are Oral Surgery, Prophylaxis, Treating Diseases of the Mouth, Anesthetics and Extractions.

Most systemic disorders are treated in connection with the Medical Service, where we are called in consultation.

One case comes to mind of a woman entered on Neurological Service, who

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had an hallucination that everyone was trying to harm her, and at other times she would have crying spells that would last for hours. She was referred to the Dental Department for a Prophylaxis. Upon examining the mouth it was found that the right lower third molar was missing. The X-Ray showed the tooth lying horizontally, deeply imbedded in bone. Upon removing the tooth it was found that the anterior root had been impinging upon the inferior dental nerve, thus affecting the nervous system and the brain. The woman recovered completely within a short time and has been in good mental condition ever since.

We refer from fifteen to fifty patients to the X-Ray Department every month.

We handle about fifteen patients every morning, and in the afternoon the Internes care for a Children's Clinic, where they operate for pre-school age children.

Yours very truly,

W. S. LOCKE, D.D.S.,

Director of Dental Service,

Cincinnati General Hospital.

## CHAPTER VIII

### THE ODONTALYSIS

One of the most valuable findings of the research department of the American Dental Society, is the relation of tooth troubles to systemic troubles. The benefit of this finding is important to humanity, as it points to the remedy for many ailments that have heretofore remained unexplained. The benefit to dentistry is that it demonstrates to the public the importance of care of the teeth. Whether the teeth are in themselves the origin of the trouble, which sometimes they are, or relay points, the bad condition of which augments a systemic condition originating some

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other place, it remains a dominant fact that care of the teeth is necessary not only for prevention of disease, but for its cure. Hospitals where general analytical tests, such as blood test, temperature, breathing, urinalysis, Wasserman's, etc., have been the regular schedule for the majority of the patients, are beginning to add the "Odontalysis," meaning the test of the tooth condition. This is a new word we have coined to express this new hospital department work. Hospital attention to the teeth of patients reduces the time necessary for recovery from sickness. This item alone, in many cases, will reduce the otherwise longer stay of the patient at the hospital

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for recovery. "Dentistry in the Hospital" and the allied subject, "Dentistry in the Factory," are making rapid progress toward popular appreciation of the value of "Care of the Teeth," to which the dental profession has untiringly given so many years of study and patient thought.

## CHAPTER IX

### THE MATTER OF STATISTICS

Dental clinicians who will take care to make statistics of their work as they go along and then publish their results for the benefit of Dental Science, will do a great work toward the advancement of dentistry and help much toward the ultimate popularization of the subject of dentistry and dental operations as performed by dentists. In carrying on the work of "Modern Dentistry for the Laity," the need of statistics to corroborate the statements of facts regarding the value of dental work was indicated. Many prominent popular

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magazines will not publish statements of fact regarding dentistry without corroborating statistics. Besides, this combination makes the most convincing article to read, so the necessity of data and statistics from the dental clinic as the work is done are very useful and important. Until recently, the kind of statistics wanted have not been available, but through the efforts of a few faithful clinicians statistics are now available, and they speak for themselves.

Some clinicians believe that it is best not to accumulate statistics, and if they are accumulated, should not be published, because they will fall into hands of writers on the subject of dentis-

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try and be used for commercial purposes. The statistics now available come from clinicians who sanction the use of them and know that by their use dentistry is being justified; that by the use of their figures, as supporting evidence to statements of fact regarding dentistry, the highest purpose and value of the statistics are being derived.

Those who have devoted their time to this work of making dentistry popular, and making the patronization of the dentist more universal, can only see in statistics the conclusive proof of the value of dental service, and therefore feel that the use of statistics is a perfectly legitimate form of presenting the subject. Dental



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statistics thus used perform a great service. It has been said that *Modern Dentistry for the Laity* is an obvious work. However obvious it may be, it was found that the work could not depend on the obvious part of it to get by the editor with his blue pencil, so the need of statistics came in strong to put the subject over. Where the *Modern Dentistry for the Laity* work went, dentistry was not yet obvious, therefore, it was best to leave the subject entirely free from any necessary faith in obvious facts and produce a convincing argument by accompanying the facts by supporting statistics. To the man whose intellect pursues countless offers of manuscript

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copy, statistics are what make such a subject as dentistry obvious. At least this is what experience in this work has shown.

Dentists who are in a position to obtain statistics and to afterwards publish them, can do a great work for the advancement of their profession.

This book was primarily written for the laity—people who know just a little about dentistry and you can imagine how interesting statistics on preventive dentistry are to them. Besides many dentists have read this book and find refreshing argument in the statistics given as they substantiate their own belief and knowledge of the subject. For instance the dental clinician, Dr.

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Robt. S. Quinby, at the Hood Rubber Co., Boston, Mass., observes the following statistics in examination of the employees of their company.

|                   |                        |     |
|-------------------|------------------------|-----|
| Grossly defective | Dental conditions..... | 40% |
| "                 | Eye                    | 8%  |
| "                 | Lung                   | 4%  |
| "                 | Heart                  | 3%  |
| Hernial           | "                      | 5%  |

Observe that forty per cent. are found to have defective teeth while but five per cent. and thereabouts have other functional defects. The statistics are interesting to the dental profession who, you might say, know such is the condition as a fact but they know it better when the statistics substantiate it.

However, to the public these statistics are most interesting

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and necessary to make the subject obvious and thoroughly understood for without such statistics the subject is not obvious to the non-dental public. If this book but stirs the interest of the reader to a further and more complete study of the crying need of more systemic dental care by individuals by seeing their dentist regularly for prophylaxis the author will consider the time spent in preparing this work well spent.

## CHAPTER X

### ITEMIZATION OF INSTRUMENTS, SUPPLIES AND EQUIPMENT USED IN INSTITUTIONAL AND INDUSTRIAL DENTAL CLIN- ICS AND IN HOSPITAL INFIR- MARIES AND PRIVATE PRO- PHYLACTIC PRACTICE.

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#### INSTRUMENTS AND SUPPLIES 1-Z

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##### First Aid Instruments and Prophylaxis Supplies

Instruments and supplies "1-Z" together with any equipment "2-Y," "3-X," "4-W," "5-V," "6-U" or "7-T" make a complete First Aid Outfit.

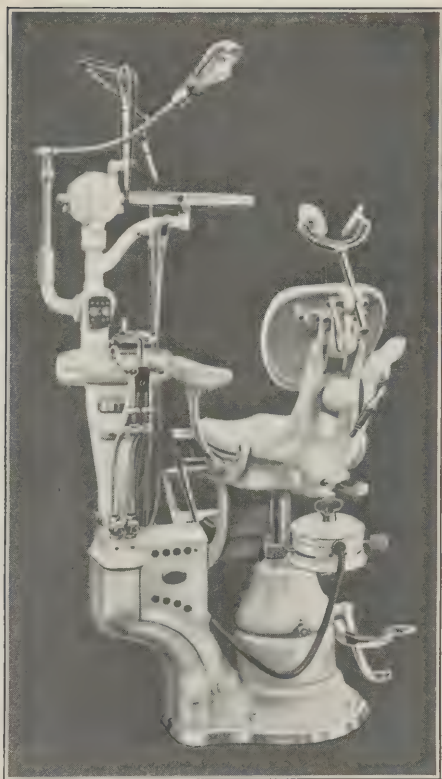
##### INSTRUMENTS

- 1 C. S. D. P. Scaler No. 1.
- 1 C. S. D. P. Scaler No. 5.
- 1 C. S. D. P. Scaler No. 6.
- 1 C. S. D. P. Scaler No. 9.
- 1 C. S. D. P. Scaler No. 11.
- 1 C. S. Chisel No. 48-L.
- 1 C. S. Scaler No. 2.
- 1 C. S. Scaler No. 13, Younger-Good.
- 1 C. S. Scaler No. 33.
- 1 C. S. Scaler No. 34.
- 1 C. S. Scaler, Tomkins No. 11.
- 1 C. S. File, Tomkins No. 1.
- 1 C. S. Smith Prophylaxis File No. 13.
- 1 C. S. Smith Prophylaxis File No. 14.

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### **Instruments and Supplies 1-Z—Continued.**

- 14 C. S. Handles No. 10-A, @ 45c.
- 1 C. S. Explorer Point No. 17.
- 1 C. S. Explorer Point No. 6.
- 1 C. S. D. E. Handle No. 17.
- 1 Set L. H. Bates Scalars.
- 1 Pair Pliers No. 11.
- 1 Mouth Mirror.
- 1 Woodson D. E. Plastic Inst. No. 1.
- 1 Woodson D. E. Plastic Inst. No. 2.
- 1 Woodson D. E. Plastic Inst. No. 3.
- 1 Amalgam Carrier and Plugger No. 7.
- 1 Cement Spatula No. 36.
- 1 Hand Porte Polisher, Contra Angle.
- 1 Water Syringe, Moffatt.
- 1 Kuroris Cotton Carrier.
- 1 Alcohol Lamp.
- 1 Gum Lancet.
- 1 Mounted Arkansas Stone, in box.
- 1 Magic Napkin Holder.
- 1 Ribbon Saw.
- 1 Package Kerr Broaches, fine.
- 1 Package Kerr Broaches, extra fine.
- 1 Package Pulp Canal Cleaners.
- 1 Broach Holder.
- 1 Ivory Cotton Roll Clamp, Bicuspid.
- 1 Ivory Cotton Roll Clamp, Molar.
- 1 Pair Tooth Forceps No. 150, Incisor and Root, Upper.
- 1 Pair Tooth Forceps No. 151, Incisor and Root, Lower.
- 1 Pair Tooth Forceps No. 18-R, Upper Molar, Right Side.
- 1 Pair Tooth Forceps No. 18-L, Upper Molar, Left Side.
- 1 Pair Tooth Forceps No. 15 Lower Universal



S. S. White Equipment "D"



A. C. Clark Unit and Ritter Chair



# *Modern Dentistry*

## **Instruments and Supplies 1-Z—Continued.**

Molar.

1 Pair Tooth Forceps No. 213, Incisor and Cuspid, Upper.

1 Pair Tooth Forceps No. 210, Upper Third Molar.

1 Pair Tooth Forceps No. 222, Lower Third Molar.

1 Chip Blower.

1 Abscess Syringe with Platinum Point.

1 Hypodermic Syringe, Tag Record complete with Needles and Attachments.

1 Contra Angle "U" attachment for Doriot No. 3.

1 Gross S. S. W. Asst. No. 2 Burs.

6 Huey Mandrels.

1 Porte Polisher Mandrel No. 307.

1 Cement Slab No. 8.

## **SUPPLIES**

1 Box Prophylaxo Tablets.

1 Bottle Taxi.

1 Box Burley Polishers, Asst.

1 Box Mounted Wheel Brushes.

1 Box Mounted Cup Brushes.

1 Box Tooth Polishing Brushes for Porte Polishers.

6 Mounted Carbo Points.

1 Box Wood Points for Hand Porte Polisher.

1 Lb. Pumice.

1 Box Temporary Stopping, Asst.

1 Oz. Sterling Alloy.

$\frac{1}{4}$  Lb. Cone Mercury, Sacco.

1 Box Caulk Petroid Cement.

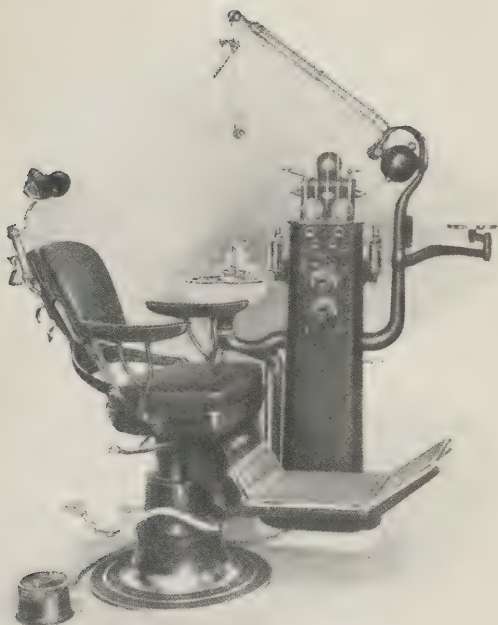
1 Box C. & B. Cement.

1 Box Smith's Certified Enamel.

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### **Instruments and Supplies 1-Z—Continued.**

- 1 Box 100 Absorbent Cotton Rolls, 6-in., Asst.
- 1 Box 50 Aseptic Dental Napkins, J. & J.  
No. 2, 6x6.
- 1 Small box Absorbent J. & J. Cotton.
- 1 J. & J. Waste Receiver and Cartons.
- 1 Cotton Holder No. 1.
- 1 Spool 150 yds. Waxed Floss Silk, J. & J.
- 1 Oz. Waites Anaesthetic, without Cocaine.
- 1 Tube Procaine (Novocaine) Tablets.
- 1 Tube Salt (Ringer) Tablets.
- 1 Dissolving Cup 3cc Pyrex Glass.
- 1 Dappan Glass Cup.
- 1 Bottle Peroxide Hydrogen.
- 1 Apron for Patient, Oiled Silk.
- 1 Miniature Bunsen Burner and Tubing.
- 1 Box Finishing Strips, Asst.
- 6 Boxes Polishing Disks, Asst.
- 1 Box Abscess Remedy and Root Canal Filler.
- 1 Box Gutta-percha Points.
- 1 Box J. & J. Absorbent Cotton Points.
- 1 Package Orange Wood.
- 1 Box Carmi Lusto Tape.
- 1 Bottle Phenol 95%, Dental Medicine.
- 1 Bottle Eugenol, Dental Medicine.
- 1 Bottle Tricresol and Formalin, Dental  
Medicine.
- 1 Bottle Black's Mixture, Dental Medicine.
- 1 Bottle Campho Phenique, Dental Medicine.
- 1 Bottle Trichloroacetic Acid, Dental Medicine.
- 1 Bottle Tincture Aconite, Iodine and Chloro-  
form.
- 1 Bottle Tricresol.
- 1 Bottle Tincture Calendula.



Ritter Unit and Ritter Chair



S. S. White No. 3 Unit and S. S. White Chair

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## **EQUIPMENT 2-Y**

- 1 Harvard Peerless Chair.
  - 1 S. S. W. Equipment Unit Stand No. 3, consisting of Spiral Flush Fountain Cuspidor, Electric Light and Electric Engine any Voltage D. C., and Doriot No. 3 Handpiece, Bracket and Bracket Table No. 3.
  - 1 Harvard Cabinet No. 62-D.
  - 1 Electro Dental Sterilizer, Onyx Base.
  - 1 Glass Top Aseptic Table, 20x16.
- 

## **EQUIPMENT 3-X**

- 1 S. S. W. Equipment Combination "D," consisting of Diamond Chair S. S. W. All-Cord Electric Engine, Doriot Handpiece No. 3, D. C. or A. C., Current any Voltage, Bracket and Table Glass Top No. 3, Electric Light and Bracket, Spiral Flush Fountain Cuspidor, Air and Gas Connections.
  - 1 American Cabinet No. 60-E.
  - 1 Castle Sterilizer, Electric, No. 410-D.
  - 1 Glass Top Aseptic White Enamel Table, 20x16.
- 

## **EQUIPMENT 4-W**

- 1 Ritter Ideal Columbia Chair.
- 1 Electro-Dental Unit consisting of Cuspidor, Saliva Ejector, Electric Engine, Rhein Light, Air Compressor, Atomizer and Water Heater Bracket, Bracket Table and Atomizers, Doriot Hand Piece.

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### **Equipment 4-W—Continued.**

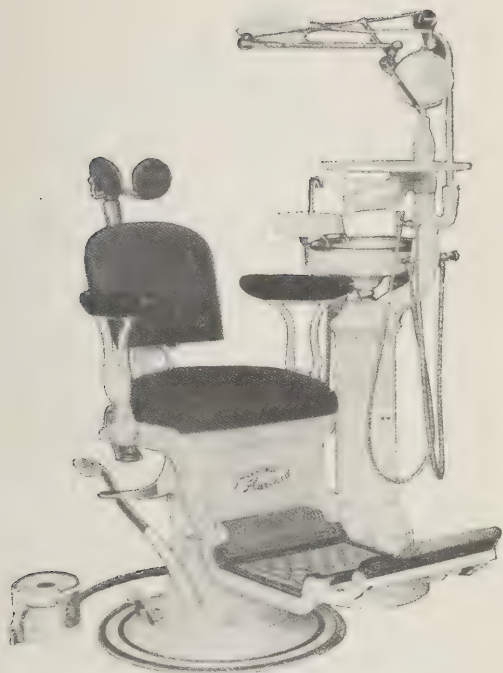
- 1 American Cabinet, Steel, No. 110.
  - 1 Castle Electric Sterilizer No. 410-D, on  
Separate Stand.
  - 1 Aseptic Glass Top Table, 30x24.
- 

### **EQUIPMENT 5-V**

- 1 Harvard Peerless Dental Chair.
  - 1 Ritter Unit Equipment, consisting of Ritter Electric Engine A. C. All-Cord Type, Clark 65 Streamline Cuspidor, Bracket and Glass Top Table, Complete Switch Board of Appliances.
  - 1 All Metal White Enamel Cabinet with Opal Glass Table Top.
  - 1 Pelton & Crane Sterilizer.
  - 1 Glass Top Stand, 20x16. Glass Top, 1 Glass Shelf, Metal Frame, White Enamel with Rail.
- 

### **EQUIPMENT 6-U**

- 1 S. S. W. Diamond Chair.
- 1 Weber Unit, consisting of A. C. or D. C. Engine with Deriot Hand Piece, Cuspidor, Light, Bracket Table and Saliva Ejector.
- 1 Lee Smith & Sons Co. Steel White Enamel Cabinet No. 506.
- 1 Aseptic Glass Top Table.
- 1 Holmes Electric Sterilizer.
- 1 Sanican Receptacle.



Weber Unit and Harvard Chair



Electro Dental Senior Unit and Ritter  
Dental Chair



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## **EQUIPMENT 7-T**

- 1 Ritter Ideal Dental Chair.
  - 1 A. C. Clark & Co. "U" Pedestal Unit, consisting of Pedestal, A. C. Clark & Co. Double Bowl Streamline Cuspidor, Bracket and Table, Ritter Swivel Type Model "C" Electric Engine, All-Cord with Doriot Handpiece.
  - 1 American Cabinet No. 60-E.
  - 1 Castle Sterilizer, Electric.
  - 1 Sanitary Can.
  - 1 Glass Top Table with Glass Shelf and Rail.
- 

## **SUMMARY**

- Outfit 12-Y-Z —Supplies 1-Z; Equipment 2-Y.
- Outfit 13-X-Z —Supplies 1-Z; Equipment 3-X.
- Outfit 14-W-Z—Supplies 1-Z; Equipment 4-W.
- Outfit 15-V-Z —Supplies 1-Z; Equipment 5-V.
- Outfit 16-U-Z —Supplies 1-Z; Equipment 6-U.
- Outfit 17-T-Z —Supplies 1-Z; Equipment 7-T.

The current prices of these instruments, supplies and equipment cost from \$1,000.00 to \$1,800.00. Of course there are other combinations of equipment that can be selected to suit every need but the above combination of selections are best adapted to your use.

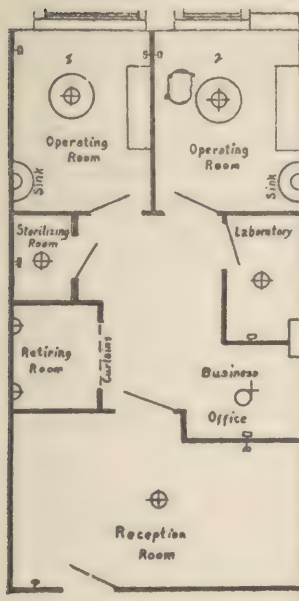
The foregoing equipment is properly called prophylaxis equipment. For detail analytical work a dental X-Ray machine is necessary, but we do not include it here because very good work is done with the general equipment by sending special cases requiring X-Ray to an X-Ray specialist.

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The same equipment is used in the modern dental office for private practice together with additional instruments and laboratory equipment needed, most important of which are instruments for operative dentistry, oral surgery, prosthetic (artificial tooth work) and crown and bridge work.

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### PRIVATE PRACTICE DENTAL OFFICE PLAN



A GOOD plan for a dental office is one of the most agreeable presentations of the dentist's services to his patients. Rooms of proper size affording easy handling of large practice are only obtained by special arrangements of the available space. This cut shows

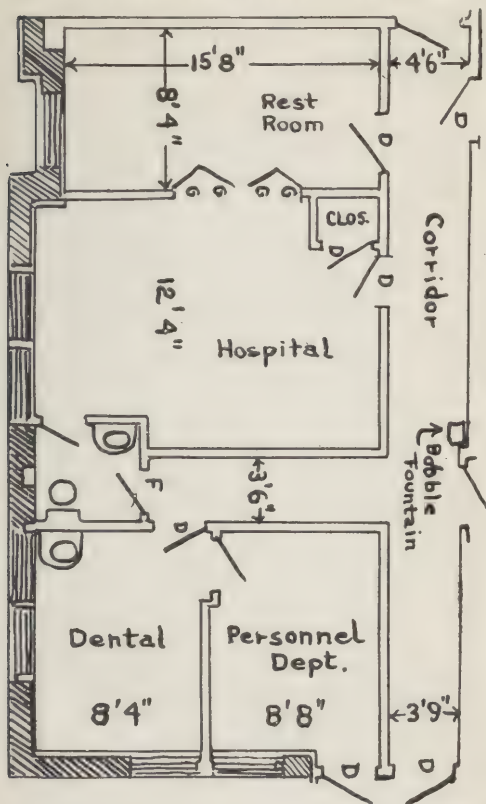
plan of a model dental suite consisting of seven rooms and hall in space 13 x 26 feet. Two operating rooms, sterilizing

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room, dental laboratory, business office, retiring room, waiting room and hall. Office buildings, factory administration buildings and hospital buildings should include adequate space for the dental office and dental clinic.

Architects drawing designs for such buildings would do well to consult local dentists as to their particular needs and incorporate them in the plans.

# INDUSTRIAL DENTAL CLINIC PLAN



This drawing shows a very good floor plan for medical supervision with dental prophylaxis.



## CHAPTER XI

List of Industrial Companies which have completed their medical service by the addition of a Dental Department.

The following corporations are operating dental clinics. This list shows several additions of important industries that have taken up industrial dentistry since our last list published in the *Dental Register*:

**Adamsville, Alabama—**

Docena Iron Works.

Tennessee Coal & Iron Co., Wenonah Mines.

Tennessee Coal & Iron Co., Ishkooda Mines.

**Acipo, Alabama—**

American Cast Iron Pipe.

**Alabama City, Alabama—**

Dwight Mfg. Co.

**Birmingham, Alabama—**

American Cast Iron Pipe Co.

Tennessee Coal & Iron Co.

**Bessemer, Alabama—**

Tennessee Coal & Iron Co., Muscoda Works.

**Chickasaw, Alabama—**

Chickasaw Shipbuilding Co.

**Ensley, Alabama—**

Tennessee Coal & Iron Co., Bayview Mines.

Westfield Clinic.

**Edgewater, Alabama—**

Edgewater Works.

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### **Fairfield, Alabama—**

Tennessee Coal & Iron Co.

### **Johns, Alabama—**

Tennessee Coal & Iron Co.

### **Davenport, California—**

Santa Cruz Portland Cement Co.

### **Fresno, California—**

California Associated Raisin Growers.

### **San Francisco, California—**

The Emporium.

### **Denver, Colorado—**

The Colorado Fuel & Iron Co.

Daniels & Fisher Store Co.

Gates Rubber Co.

### **Pueblo, Colorado—**

The Colorado Fuel & Iron Co.

### **Trinidad, Colorado—**

The Colorado Fuel & Iron Co.

### **New Haven, Connecticut—**

Winchester Repeating Arms Co.

### **Milford, Delaware—**

The L. D. Caulk Co.

### **Wilmington, Delaware—**

Dupont Powder Co.

Joseph Bancroft & Sons Co.

Electric Hose Co.

### **New Haven, Connecticut—**

Kolynos Co.

L. Candee Co.

### **Stamford, Connecticut—**

Yale & Towne Mfg. Co.

### **South Manchester, Connecticut—**

Cheney Bros. Co.



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### **Atlanta, Georgia—**

Fulton Bag & Cotton Mills.

### **Chicago, Illinois—**

Morris & Co.

Montgomery & Ward Co.

Armour & Co.

The Crane Co.

The Diamond Match Co.

Hart, Schaffner & Marx.

Kabo Corset Co.

Sears, Roebuck & Co.

The International Harvester Co.

### **Peoria, Illinois—**

The Avery Co.

### **Indiana Harbor, Indiana—**

The Inland Steel Co.

### **New Orleans, Louisiana—**

D. H. Holmes Co.

Maison Blanche, Inc.

### **South Brewer, Maine—**

The Eastern Mfg. Co.

### **Boston, Massachusetts—**

The Hood Rubber Co.

Filene Co-operative Association.

### **Watertown, Massachusetts—**

Hood Rubber Co. (Factory).

### **Framingham, Massachusetts—**

The Dennison Mfg. Co.

### **Chicopee Falls, Massachusetts—**

Fisk Rubber Co.

A. G. Spalding Co.

### **Pittsfield, Massachusetts—**

General El. Co.

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### **Springfield, Massachusetts—**

Am. Bosch Magneto Co., Brightwood Station.  
National Equipment Co.

### **Holyoke, Massachusetts—**

Farr Alpaca Co.

### **Lynn, Massachusetts—**

General Electric Co.

### **Worcester, Massachusetts—**

The Norton Co.

### **Wekter, Massachusetts—**

S. Slater & Sons Co.

### **Wellesly Hills, Massachusetts—**

Babson Statistical Organization.

### **Detroit, Michigan—**

The Ford Motor Car Co.  
Solvay Process Co.

### **Kalamazoo, Michigan—**

Kalamazoo Stove Co.

### **Minneapolis, Minnesota—**

The Washburn-Crosby Co.  
The Northwestern Knitting Co.  
National Lamp Co.  
Munsingwear Corporation.

### **Kansas City, Missouri—**

Jones Store Co.  
Montgomery & Ward.

### **St. Louis, Missouri—**

National Lamp Works.  
Union Electric Light & Power Co.  
Monsanto Chemical Works.  
Stix, Baer & Fuller Dry Goods Co.  
Century Electric Co.  
B. Nugent & Bros. Dry Goods Co.

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- Concord, New Hampshire—**  
Union District Dental Clinic.
- Manchester, New Hampshire—**  
The Amoskeag Co.
- Nashua, New Hampshire—**  
Nashua City Dental Clinic.  
Maginnis Cotton Mills.
- Harrison, New Jersey—**  
Harrison Lamp Works.  
The General Electric Co.
- Hurley, New Mexico—**  
Chino Copper Co.
- Brooklyn, New York—**  
Schrader & Sons.
- Buffalo, New York—**  
Larkin Co.  
American Radiator Co.  
Buffalo Miniature Lamp Works.  
Pierce-Arrow Motor Car Co.
- Johnson City, New York—**  
Endicott-Johnson Co.  
E.-J. Workers Medical & Relief.
- McGregor, New York—**  
Metropolitan Life Insurance Co.
- New York City, New York—**  
International Garment Workers' Union.  
Lord & Taylor.  
Macy Mutual Aid Assn.  
James McCreery & Co.  
Metropolitan Life Insurance Co.  
New York Telephone Co.  
John Wanamaker Store.  
Colgate & Co.  
Sanatorium.

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### **Niagara Falls, New York—**

Oldsbury Electro Chem. Co.

### **Rochester, New York—**

The Bousch & Lomb Co.

### **Schenectady, New York—**

General Electric Co.

### **Akron, Ohio—**

The Firestone Tire & Rubber Co.

The B. F. Goodrich Co.

National Lamp Works.

### **Cincinnati, Ohio—**

The Cincinnati Milling Machine Co.

The R. K. LeBlond Machine Tool Co.

The Worthington Pump Co.

The Lunkenheimer Co.

### **Cleveland, Ohio—**

The Bailey Co.

The Joseph & Feiss Co.

The Kaynes Co.

National Lamp Works of General El. Co.  
(Parent Co. of all Natl. Lamp Works).

H. & E. Blouse Co.

### **Columbus, Ohio—**

Jeffries Mfg. Co.

### **Dayton, Ohio—**

Dayton Electric Laboratories Co.

The Dayton Metal Products Co.

The National Cash Register Co.

Domestic Engineering Co.

### **Hamilton, Ohio—**

The Hooven-Owens-Rentschler Co.

### **Newcomerstown, Ohio—**

J. B. Clow Co.

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### **Warren, Ohio—**

National Lamp Works of General El. Co.

### **Youngstown, Ohio—**

National Lamp Works of General El. Co.

### **Erie, Pennsylvania—**

Erie Forge Co.

### **Philadelphia, Pennsylvania—**

Powers, Weightman, Rosengarten Co.

John Wanamaker.

The S. S. White Dental Mfg. Co.

Lit Brothers.

J. G. Brill Co.

John B. Stetson Co.

### **Pittsburgh, Pennsylvania—**

The Armstrong Cork Co.

The H. J. Heinz Co.

Lee S. Smith & Son Co.

Kaufman's "The Big Store."

### **Reading, Pennsylvania—**

Berkshire Knitting Mills.

Berkshire Knitting Machine Co.

### **Bristol, Rhode Island—**

National India Rubber Co.

### **Central Falls, Rhode Island—**

Rhode Glass Division (Natl. Lamp Works

General Electric Co.).

### **Esmond, Rhode Island—**

Esmond Mills.

### **Bosevaine, Virginia—**

Pocahontas Fuel Co.

### **Itman, West Virginia—**

Pocahontas Fuel Co.

### **Jenkinjones, West Virginia—**

Pocahontas Fuel Co.

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**Maybeury, West Virginia—**

Pocahontas Fuel Co.

**War, West Virginia—**

Williams Pocahontas Coal Co.

**Appleton, Wisconsin—**

Kimberly-Clark Co.

**Kohler, Wisconsin—**

Kohler Mfg. Co.

**Milwaukee, Wisconsin.**

Phoenix Knitting Mills.

Cutler-Hammer Mfg. Co.

Chain Belt Co.

Wisconsin Bridge Works.

**Neenah, Wisconsin—**

Kimberly-Clark Co.

**Niagara, Wisconsin—**

Kimberly-Clark Co.

**Toronto, Canada—**

T. Eaton Co., Ltd.

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### LIST OF HOSPITALS EQUIPPED WITH DENTAL DEPARTMENTS

I have not had complete returns from my hospital questionnaire and will no doubt have more names of hospitals using dental diagnosis in their regular schedule of standardized hospital practice in group diagnosis. The following are the names of prominent hospitals which are equipped with dental apparatus and instruments and retain dental clinicians:

Buffalo Columbus Hospital, Buffalo, N. Y.  
Buffalo City Hospital, Buffalo, N. Y.  
Mercy Hospital, Hamilton, O.  
Axtell Hospital, Newton, Kans.  
Hatcher Hospital, Wellington, Kans.  
Detention Hospital, Sioux City, Ia.  
German Lutheran Hospital, 27th & Pierce St.,  
Sioux City, Ia.  
Maternity Hospital, 28th & Court St., Sioux  
City, Ia.  
St. Joseph's Mercy, 22nd & Court St., Sioux  
City, Ia.  
Samaritan Hospital, 17th & Pierce St., Sioux  
City, Ia.  
St. Vincent's Hospital, 7th & Jones St., Sioux  
City, Ia.  
City Hospital, St. Louis, Mo.  
Barnes Hospital, St. Louis, Mo.  
City Hospital, Worcester, Mass.  
Memorial Hospital, Worcester, Mass.

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- Charity Hospital, New Orleans, La.  
Rhode Island Hospital, Providence, R. I.  
Wallum Lake Sanitarium, Wallum Lake, R. I.  
The National Jewish Relief Society, Edgewater, Colo.  
The National Jewish Sanitarium, E. Calfax Ave. & Colorado Blvd., Denver, Colo.  
The General Hospital, Cincinnati, O.  
The Jewish Hospital, Cincinnati, O.  
Samaritan Hospital, 17th St. & Fourth Ave., Brooklyn, N. Y.  
New Emergency Hospital, Ensley, Ala.  
Employees' Hospital, Fairfield, Ala.  
Bellevue Hospital, New York, N. Y.  
Vanderbilt Clinic, New York, N. Y.  
Homeopathic Hospital, Boston, Mass.  
Burnett Sanitarium, Fresno, Cal.  
Massachusetts General Hospital, Boston, Mass.  
Boston City Hospital, Boston, Mass.  
Brooks Hospital, Brooklyn, Mass.  
Children's Hart Hospital, Boston, Mass.  
Robert Brigham Hospital, Boston, Mass.  
Boston Dispensary, Boston, Mass.  
Salvation Army Hospital, Boston, Mass.  
Carney Hospital, Little, S. Boston, Mass.  
New England Home for Wanderers, Boston, Mass.  
Boston State Hospital, Danvers, Mass.  
Boston State Hospital, Boston, Mass.  
Medfield State Hospital, Bloomingdale, Mass.  
Wrentham State Hospital, Wrentham, Mass.  
Westboro State Hospital, Westboro, Mass.  
Foxboro State Hospital, Foxboro, Mass.  
Massachusetts School for Feeble-minded, Waverley, Mass.  
Perkins Institute for Blind, Watertown, Mass.



## CHAPTER XII

### BOOK REVIEWS

#### ACCORDED

#### "MODERN DENTISTRY FOR THE LAITY"

The following book review appeared in *The Investment Weekly and Business Digest*, New York, December, 1918. This recognition of "Modern Dentistry for the Laity and Industrial Dentistry for the Corporation" is very much appreciated. This is a review of the first edition.

"Modern Dentistry for the Laity and Industrial Dentistry for the Corporation." By Alfred Armstrong Crocker, 6 pp., 16mo. Dental Register, Cincinnati, Ohio.

Advocates a plan for the installation by corporations of a dental clinic. The corporation dentist keeps a chart of the teeth of each employe, and whenever he finds a decayed or abscessed tooth calls it to the attention of the employe's dentist. Many illnesses are directly or indirectly due to bad condition of the teeth, so that dentistry is a real aid in the manufacturer's problem. This system has been in use in the Army and Navy, in nitrate plants and the airship corporations and has been adopted by sixty-three \* large corporations in different parts of the country.

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\* This was the number of industrial dental clinics then in operation.

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The following is also a review of the first edition, which appeared in the January, 1919, number of *The American Jeweler*, Chicago, Ill. This notice of "Modern Dentistry for the Laity and Industrial Dentistry for the Corporation" helps show the diversified lines of thought to which this subject appeals.

"Modern Dentistry for the Laity and Industrial Dentistry for the Incorporation." by Alfred Armstrong Crocker. Published by the *Dental Register*, Cincinnati, Ohio.

Industrial dentistry, like industrial optics, is a new phase of welfare work, particularly of large corporations and requires more or less publicity to bring its merits to the attention of those who are chiefly interested. The subject is covered by about sixty pages, five of which contain a list of the corporations who are operating dental clinics at their factories. The subject is treated in seven short chapters, giving various aspects of dentistry as a factor in industrial corporations and the reasons for corporation dentistry.

The following review was written by *The Modern Hospital*, Chicago, and published in their Book Review Department.

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It is a review of the second edition of this book. This complimentary assistance in the popularization of the benefits derived from preventive dentistry is greatly appreciated.

"Modern Dentistry for the Laity and Industrial Dentistry for the Corporation." By Alfred A. Crocker, Cincinnati, Ohio.\*

This little volume consists of a number of short essays on dentistry and its application to individual welfare and industrial efficiency. The author deals with the importance of proper care of the teeth in relation to the health of every individual; he also lays stress on the necessity of corporations realizing what a large part the teeth play in the general health of their employes. The idea to follow in regard to your teeth, he says, is the prevention of decay, and this requires visits to the dentist at least twice a year. In order to insure the proper care of teeth on the part of employes, the best plan for the corporation to follow is to install a dental clinic, similar to the medical department now almost indispensable in large corporations. The function of the dental clinic is not to treat the teeth of the employes, but simply to examine them and recommend the treatment necessary so that the patient may go to his family dentist immediately. Many companies do not absolutely require this examination twice a year, but find

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\*The Sam'l A. Crocker Co., Cincinnati, Ohio, 1919.

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that the employes are glad of the opportunity and willing to take advantage of it. As for the value of this plan to the corporation, "corporations installing dental service for employes are taking a step for economy in manufacturing, conservancy of manufacturing hours, and maintenance of health of operatives." The importance of proper care of the teeth has been emphasized by preventive dentistry and oral hygiene during the war, since the United States Government required every recruit for the army or navy aviation corps to have his teeth put in good prophylactic condition. The last essay, "Tooth Troubles," gives an idea of "what prevention prevents." A list of actual requirements for establishing clinics concludes the book. The essays, which appeared originally in various magazines, are written in such a way that the average person can easily and quickly read them. The few technical terms which occur are defined. The book is dedicated to "the dental profession, whose avowed purpose is the prevention of decay and preservation of the teeth of the human race."

The following book reviews are accorded the third edition:

Here is a review which was published in the *National Jeweler*, Chicago, in their book review department October, 1920. The *National Jeweler* shows its broadmindedness in voluntarily review-

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ing a book on dentistry and joining the constantly growing coterie of editors who are going to do something for the human health as they go along.

"Modern Dentistry for the Laity." By Alfred A. Crocker, Cincinnati, Ohio.

The importance of dentistry as health insurance was strikingly emphasized during the war. In many great manufacturing plants it is regarded today as no less important, if not even of greater value, than medicine and surgery as a branch of industrial welfare work. A quoted statement by one Chicago firm, for example, reads: "Dentistry in our factory has saved our employes, as well as ourselves, over 2,000 hours in the past six months. It has increased production in proportion to the working hours saved."

A little book, that can be read through at a sitting, it is designed to arouse individuals and corporations to the health importance of the care and periodical examination of the teeth.

This review comes from a very interesting dental magazine published in England, *The Dental Practitioner*, London, England, in the November, 1920, number. You will notice that our English friends think well of this subject.

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The author takes this opportunity to express his appreciation for these words of testimonial sent from overseas.

"Modern Dentistry for the Laity." By Alfred A. Crocker. Third edition. Published by the Dental Register, Cincinnati, Ohio, U. S. A.

We have to hand an excellent little book, by Alfred A. Crocker, entitled "Modern Dentistry for the Laity." This book deals very comprehensively with the question of industrial dental clinics. In this country very few industrial companies care for the welfare of their employes by placing skilled dental treatment at their disposal. We have factory surgeons, but the time is now at hand when factory dental surgeons will be recognized as a proved necessity towards the general efficiency of our workers. Much good would accrue if this little book could be placed in the hands of all employers of labor. We congratulate Mr. Crocker for his efforts to bring this important subject before the notice of the laity.

## QUESTIONNAIRES

Here follow the questionnaires which the author sent out to companies who were using the dental system in their safety welfare work in 1918-1921. The replies are printed in this book in the chapter "Evidence of the Value of Preventative Dentistry in Industrial Corporations."

### FIRST QUESTIONNAIRE

CINCINNATI, O., October 26, 1918.

Gentlemen—We are much interested at the present time in the subject of dentistry in the factory and would like to have you let us know what particular advantages you have found by the use of dentistry in your company. It has been well known for many years that medicine and surgery were beneficial in corporations, its uses and benefits are very apparent. For this reason we would like to have you express your opinion of the results obtained by dentistry and the benefits it has brought to your company. For instance, has it met with your expectations? Has it brought better results than at first anticipated? Has it reduced the number of hours lost which were otherwise due to some untraceable cause? Has it benefited the men and women in the factory? Has it increased the value of the finished products of

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your factory? Has it noticeably increased the out-put in your factory? Do you class it along with medicine and surgery as a welfare feature for first aid? Do you believe that preventative dentistry is as important as medicine?

There, no doubt, will be certain features in the use of dentistry in your company which these questions will not touch upon, but if you will kindly give us your frank opinion of the value of dentistry in your factory it will aid us in bringing the subject into a concrete form for an article we are preparing for a prominent industrial magazine. There are many industrial companies anxious to know the results that have been obtained from dentistry in the companies who are using the dental system in their factory, and we are preparing an article which will answer the question and give results as found by the various companies whose names we have that are using dentistry as a welfare feature. Anything else besides the answers to the above questions will be greatly appreciated.

Trusting you will take the time to answer this letter, and assuring you it will be of service to the cause of efficiency in manufacturing, we remain,

Yours truly,

AAC:RH

ALFRED A. CROCKER.



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## **SECOND QUESTIONNAIRE**

August 12, 1921.

1. How or through which primary cause was your Dental Clinic established?

2. Is Dental Clinic being operated as part of the Medical Department? If not, in what particular or definite way does it fit in with your Industrial (or Hospital) Service?

3. Cite at least six (6) serious cases of systemic disorders diagnosed through condition of teeth and mouth (X-ray) and then corrected or cured primarily by Dental Clinic.

4. How many cases per month do you refer to your Dental Radiographer?

5. Is your Dental Clinic—operated either as a part of the Medical or as a distinct unit of the Industrial (Hospital) Service—a paying proposition? Can you state or estimate approximately the annual saving in labor hours or dol-

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lars? Also give average number of employees.

6. If possible, please attach floor plan of Medical Department including Dental Clinic.

7. Please attach samples (filled out) of charting and report and record cards used, with explanation.

For statistical purposes:

1. Number of extractions—Reasons.

2. Number of treatments for prophylaxis.

3. Number of consultations with physicians—Results.

4. Number of cases where mouth was charted for work to be done by the family dentist.

5. Result of follow-up.

## BIBLIOGRAPHY

A Study of Streptococci from Pyorrhea Alveolaris and from Apical Abscesses.—Thos. B. Hartzell, M.D., D.M.D., and Arthur T. Henrici, M.D.

Oral Infection in Relation to Constitutional Infection.—Thos. B. Hartzell, M.D., D.M.D.

The Mouth as a Factor in the Pathogenesis of Heart, Kidneys and Joint Inflammations.—Thos. B. Hartzell, M.D., D.M.D.

The Dental Path—Its Importance as an Avenue to Infection.—Thos. B. Hartzell, M.D., D.M.D., and Arthur T. Henrici, M.D.

Oral Sepsis in Its Relationship to Systemic Disease.—Wm. W. Duke, M.D., Ph.D.

Care of the Mouth and Teeth.—Jos. Herbert Kauffman, D.D.S.

## *Modern Dentistry* .

Educational Lectures on Dental and Oral Hygiene.—T. C. Trigger, D.D.S.

Mouth Hygiene—A Course of Instruction for Dental Hygienists.—Alfred C. Fones, D.D.S.

Profitable Practice.—George Wood Clapp, D.D.S.

Business Science of Dentistry.—Edward S. Barber, D.D.S.

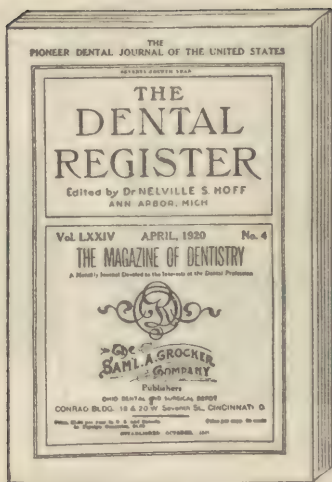


Alfred A. Crocker  
1919

**Periodical care of the teeth by a dentist is prophylaxis. It is painless without anaesthetics. Dentistry by necessity at periods of pain results in oral surgical operations which without anaesthetics are painful.**

Prophylaxis by your dentist is more than a tooth cleaning. It is a professional detection of decay which has started since the last prophylaxis by him. This decay takes place in spite of all household efforts to prevent it. By periodical prophylaxis your dentist can discover the decay before it does much damage and by this means and only by this means can you preserve the perfection of your teeth. Periodical prophylaxis by your dentist, therefore, is a professional consultation on the soundness of your tooth health.

**Prophylaxis for the Lally and Odontolysis for the Hospital Patient**



## "THE DENTAL REGISTER"

This volume would not be complete without mention of THE DENTAL REGISTER, which has done so much toward furthering the interests of Dentistry through all these years. Since 1847 the Dental Register has been published continuously.

In 1847 its first editor was Dr. James Taylor, who edited it until 1859, when Drs. Taft and Watt became joint editors. Thus it was edited until 1873, when Dr. Watt resigned, leaving Dr. Jonathan Taft as single editor until 1900. Since 1900 Dr. N. S. Hoff, of Ann Arbor Dental College, has had the editorial chair. Dr. Hoff was one of the first dental editors in the United States to sanction the popularization of Dentistry.

**I**N 1918, with the foregoing ideas as a basis, the following spread was made in the Cincinnati newspapers. This is a verbatim copy and facsimile set up of press notice used.



**Blazing the Way for an appreciation of  
the value of Dental Service and Pre-  
ventive Dentistry in maintaining  
Health and Vigor.**

### **ODONTALYSIS**

Ever thoughtful of the welfare of the community and public health, dental interests have found it eminently best that the public be advised about the health benefits derived from periodical attention to their teeth by a dentist. Decay creeps on a patient unawares, and only announces its presence after considerable tooth and nerve damage has been done. Intercept this process by permitting your dentist to care for your teeth twice a year, thus catching the decay before it has made any dangerous progress. This branch of dentistry is called prophylaxis. A part of the work is a thorough examination of the mouth and teeth. This analysis is called the odontalysis-analysis of the teeth.















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